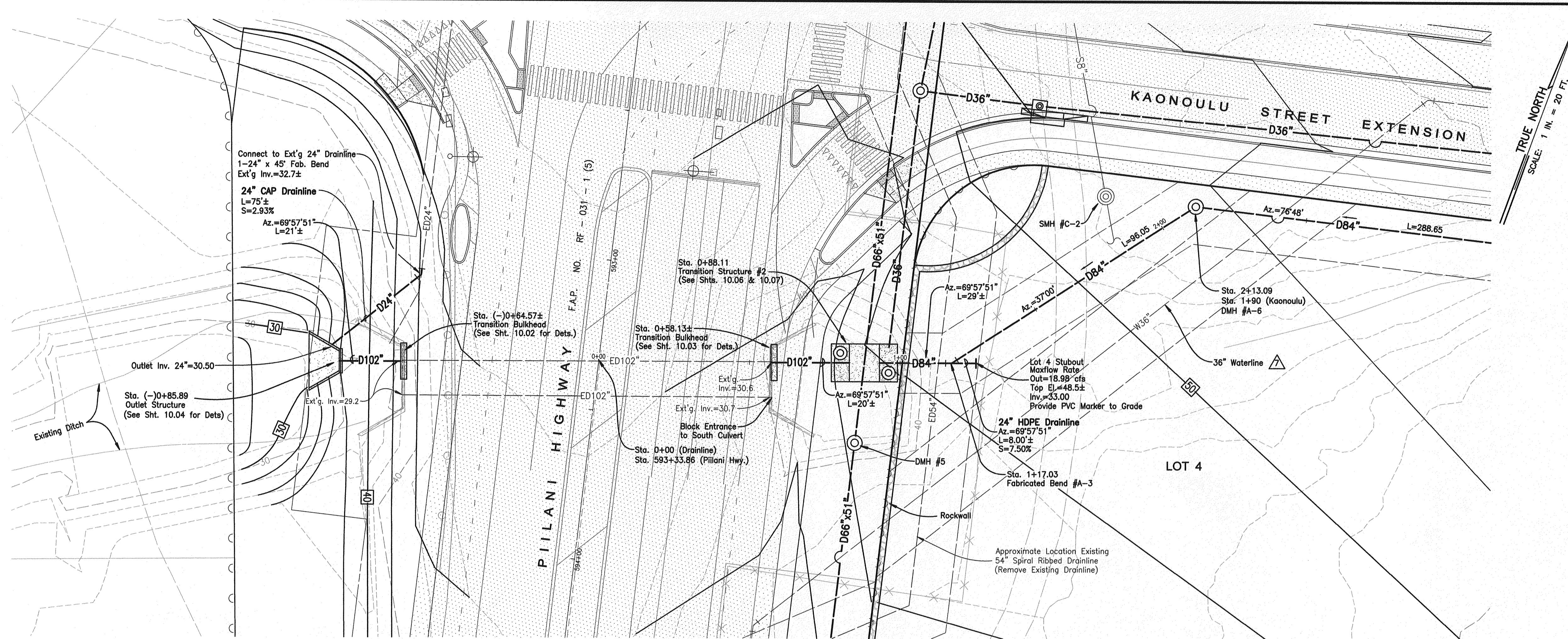
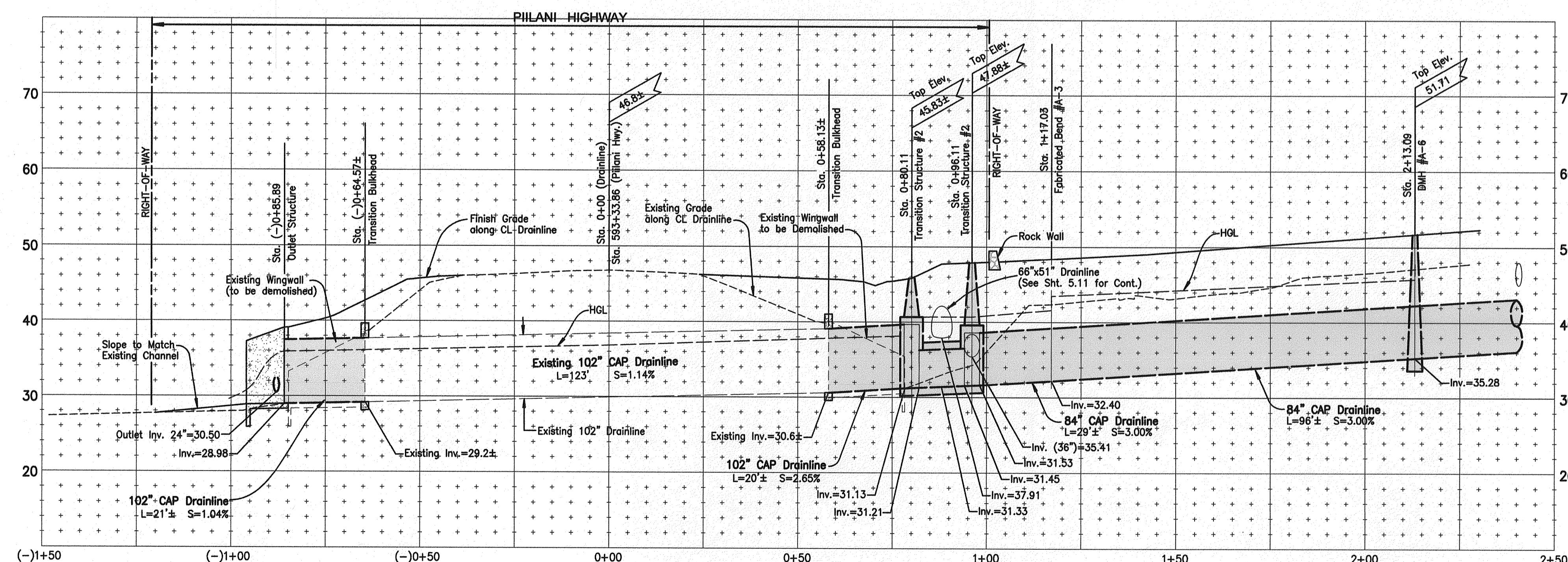


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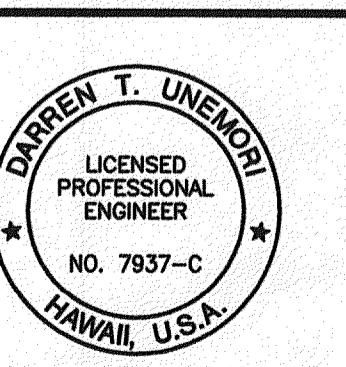


## PLAN



## PROFILE - 102" DRAINLINE CROSSING PIILANI HIGHWAY

Scale: Horiz. 1" = 20'  
Vert. 1" = 10'



 WARREN S. UNEMORI ENGINEERING, INC.  
CIVIL & STRUCTURAL ENGINEERS/LAND SURVEYORS  
WELLS STREET PROFESSIONAL CENTER, SUITE 403  
2145 WELLS STREET, WAILUKU, MAUI, HAWAII 96793

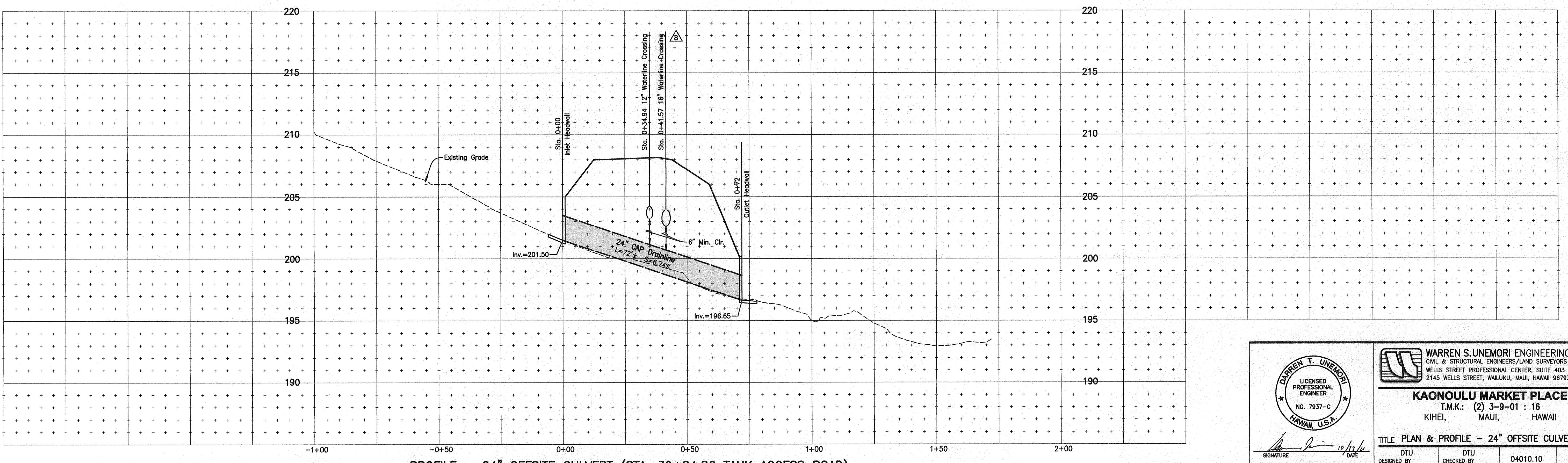
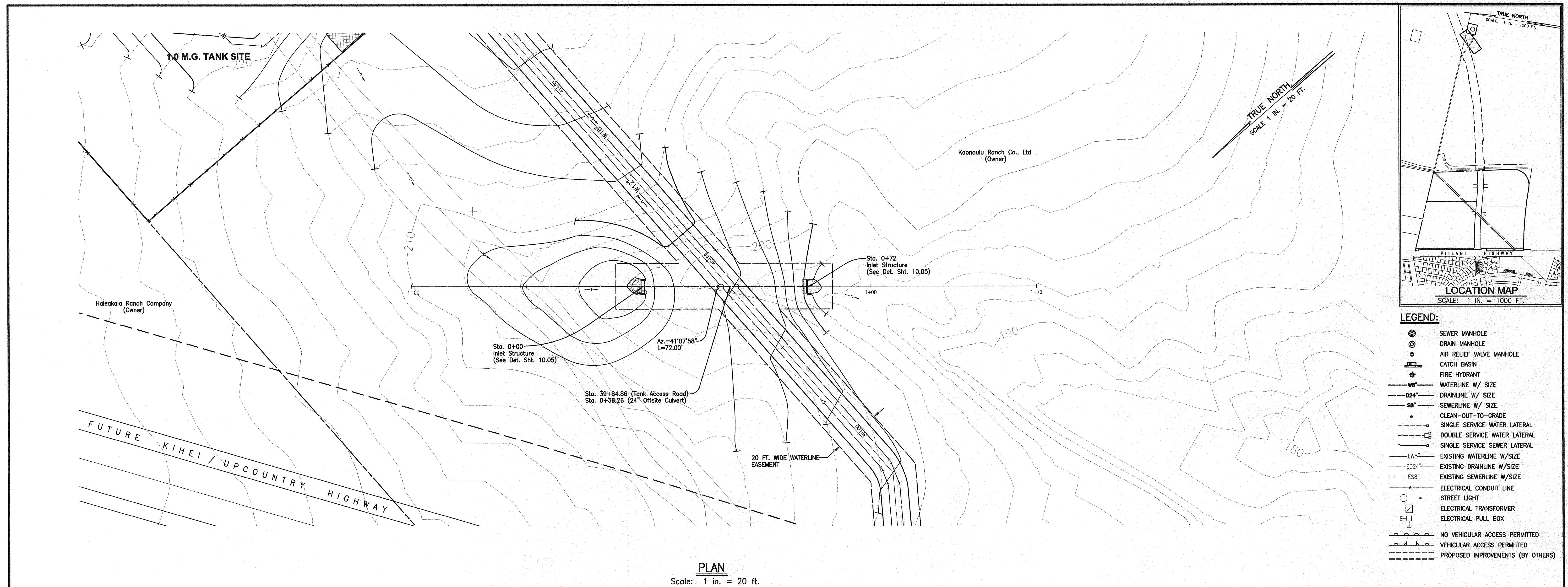
## **KAONOULU MARKET PLACE**

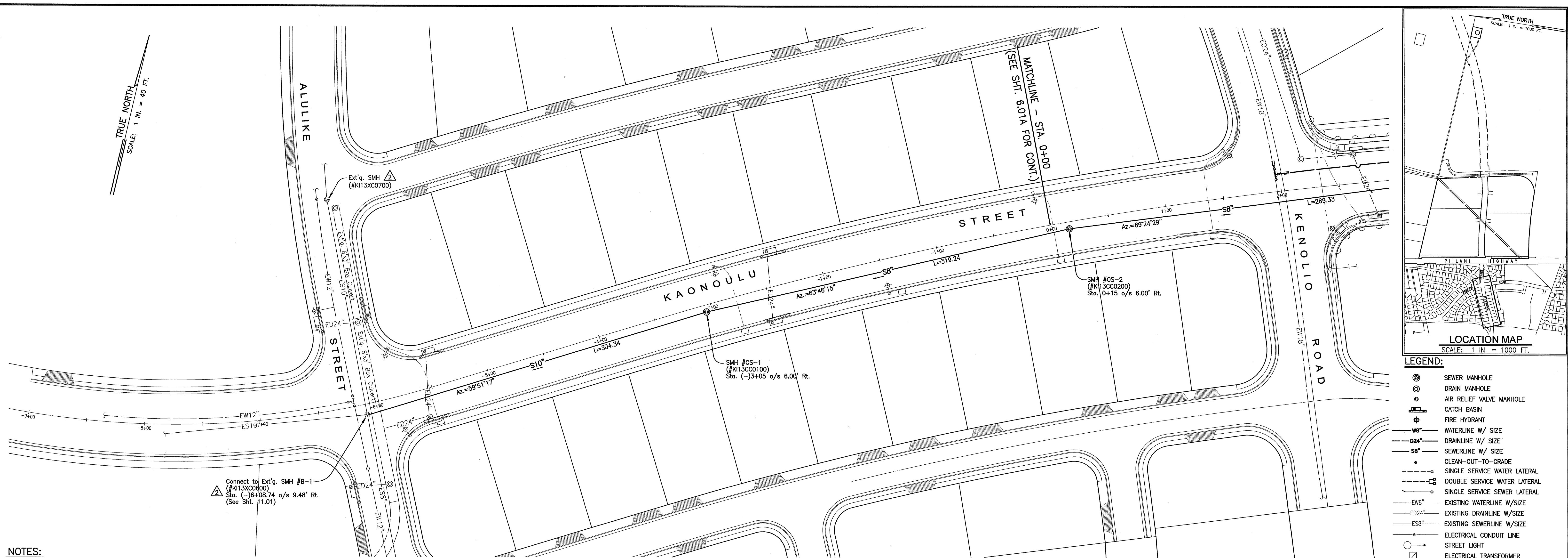
T.M.K.: (2) 3-9-01 : 16  
KIHEI, MAUI, HAWAII  
N & PROFILE - EXTENSION TO 102"

**PLAN & PROFILE - EXTENSION 10 102  
DRAINLINE CROSSING PIILANI HIGHWAY**

**DTU**      **DTU**      **04010-10**      **E 20**

 <b>7</b>	36" Waterline Relocated to Kaonolu Street	03/11/11	<small>THIS SUPER WILL SECTION RULES LAND</small>
 <b>3</b>	Revised Hwy Crossing and Added Transition Structure	10/22/08	
LETTER	DESCRIPTION	DATE	



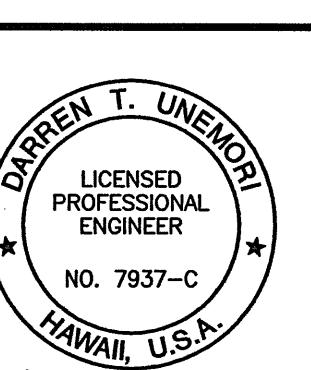
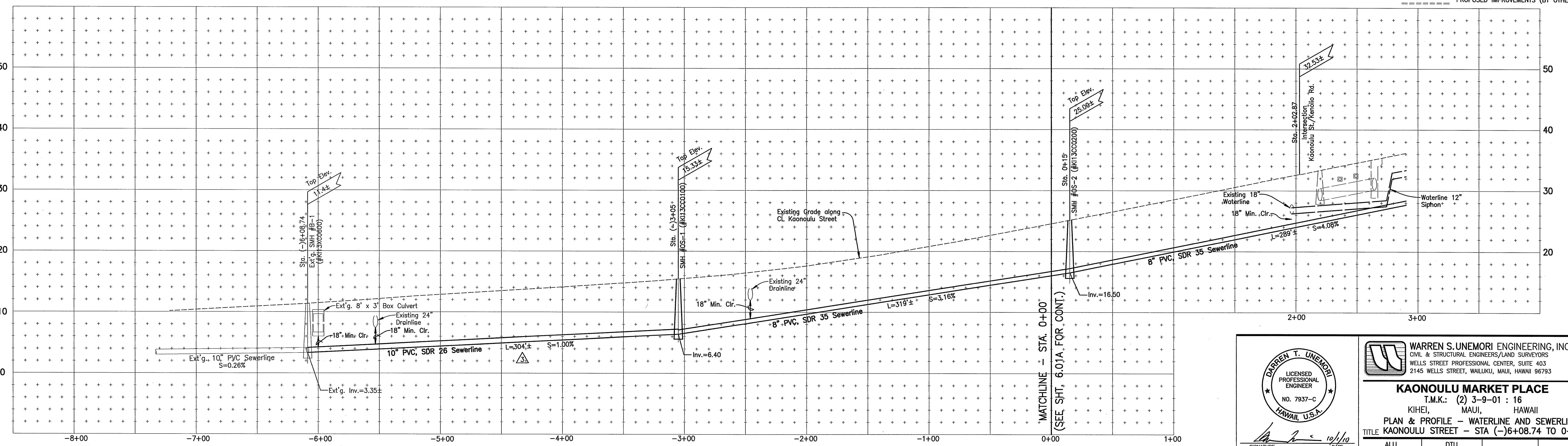


**NOTES:**

1. CONTRACTOR SHALL VERIFY EXACT LOCATION, INVERT, SIZE, AND TYPE OF EXISTING UTILITIES PRIOR TO ORDERING MATERIALS. SHOULD ANY DISCREPANCIES EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.

**PLAN**

Scale: 1 in. = 40 ft.



**WARREN S. UNEMORI ENGINEERING, INC.**  
CIVIL & STRUCTURAL ENGINEERS/LAND SURVEYORS  
WELLS STREET PROFESSIONAL CENTER, SUITE 403  
2145 WELLS STREET, WAILUKU, MAUI, HAWAII 96793

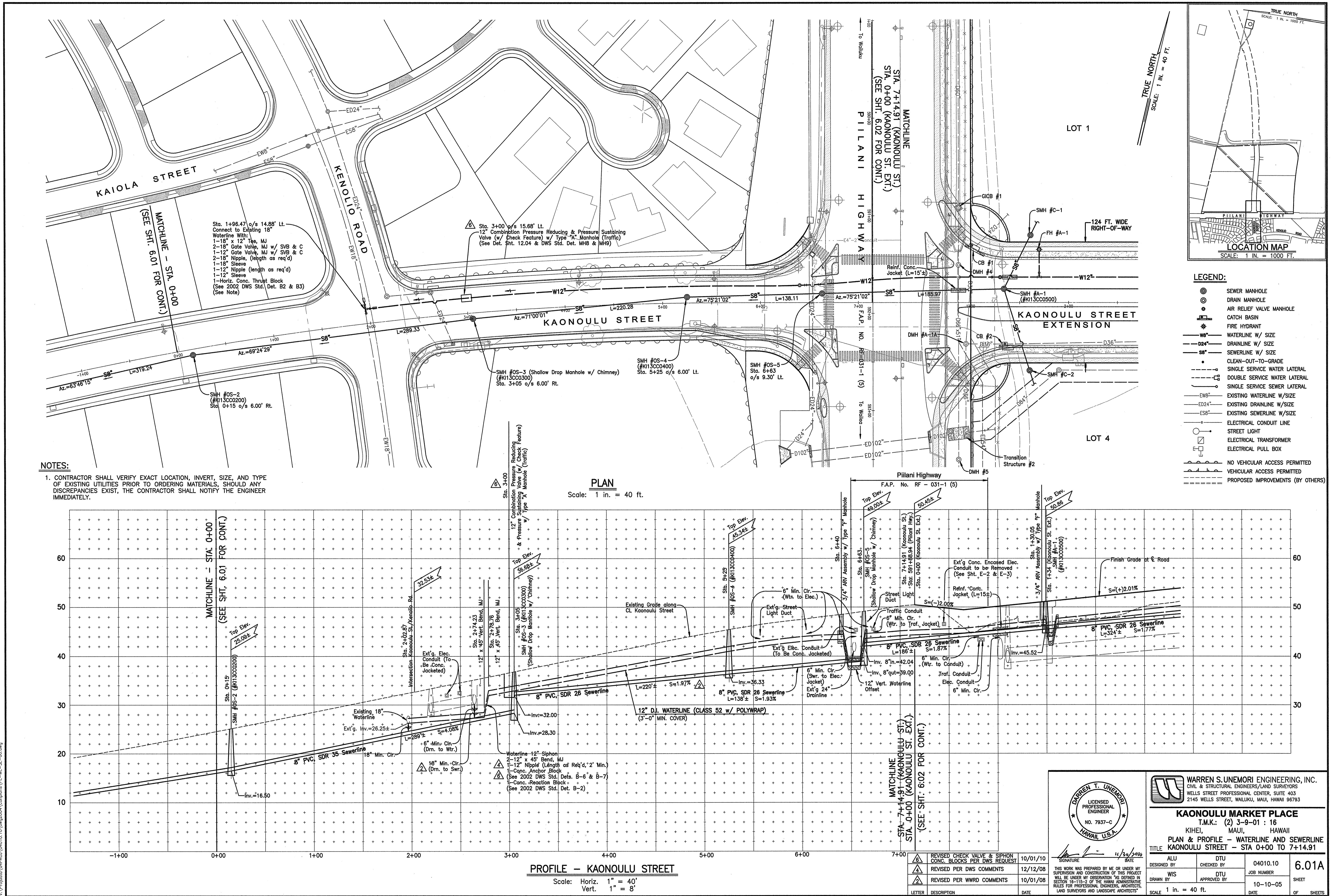
**KAONOULU MARKET PLACE**  
T.M.K.: (2) 3-9-01 : 16  
KIHEI, MAUI, HAWAII

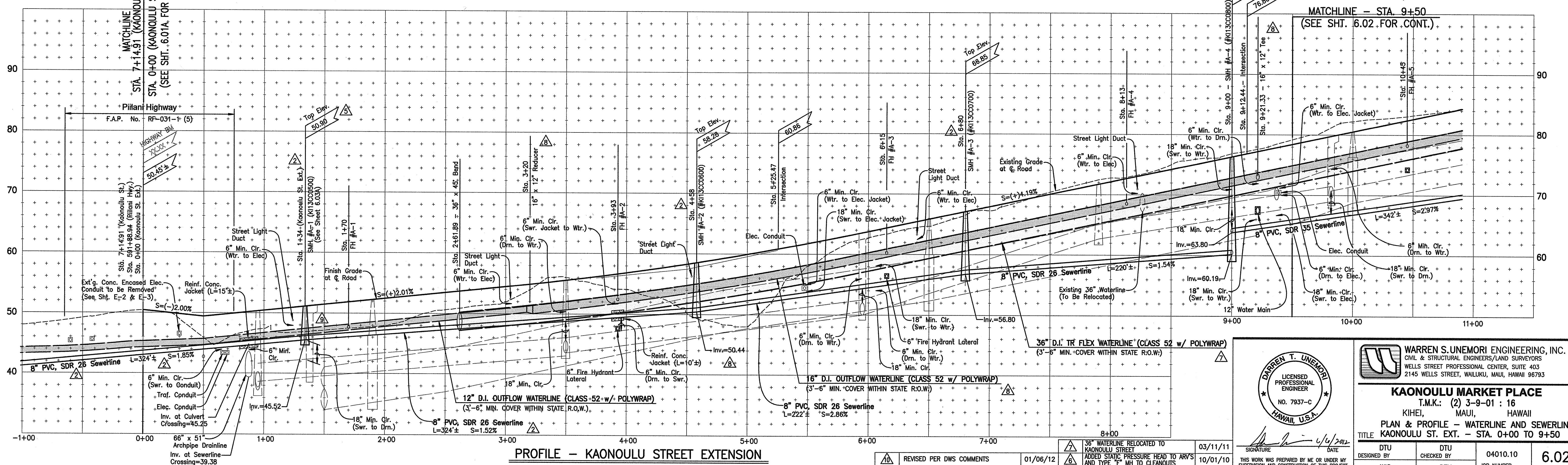
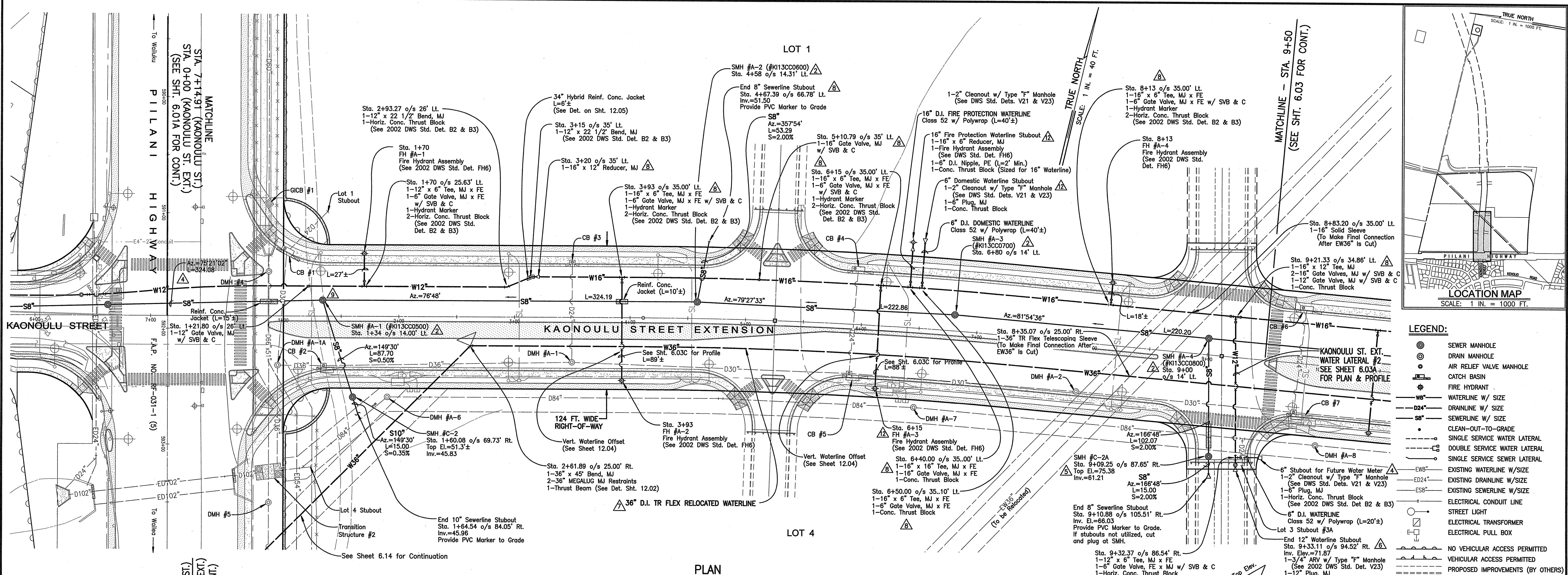
**PLAN & PROFILE - WATERLINE AND SEWERLINE**  
**TITLE KAONOULU STREET - STA (-16)+08.74 TO 0+00**

SIGNATURE  
DATE

INCREASE SIZE TO 10" PVC SEWERLINE  
REVISED PER WWRD COMMENTS  
10/01/08  
LETTER DESCRIPTION DATE

10/22/08  
10/01/08  
04010.10  
NO. 7937-C  
10-10-05  
1 in. = 40 ft.





S. UNEMORI ENGINEERING, INC.  
STRUCTURAL ENGINEERS/LAND SURVEYORS  
57 PROFESSIONAL CENTER, SUITE 103

**JU MARKET PLACE**  
X: (2) 3-9-01 : 16

MAUI, HAWAII  
FILE - WATERLINE AND SEWERLINE  
. EXT. - STA. 0+00 TO 9+50

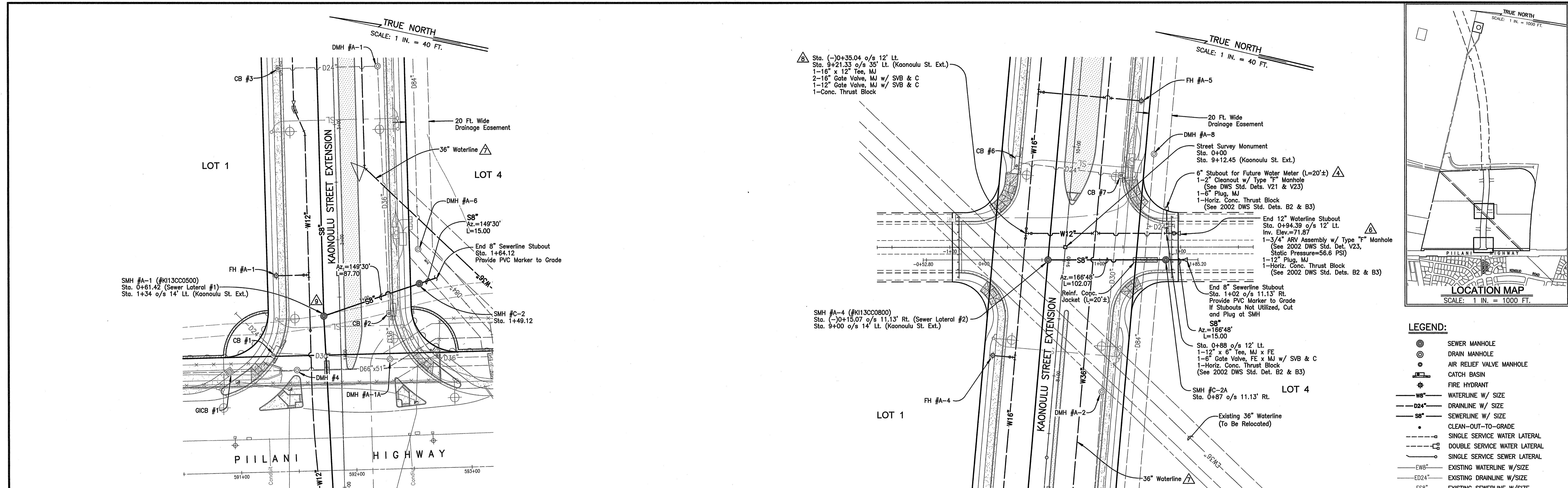
DTU  
ED. BY 04010-10 6-02

6.02

DTU VED BY	JOB NUMBER	SHEET
	10-10-05	

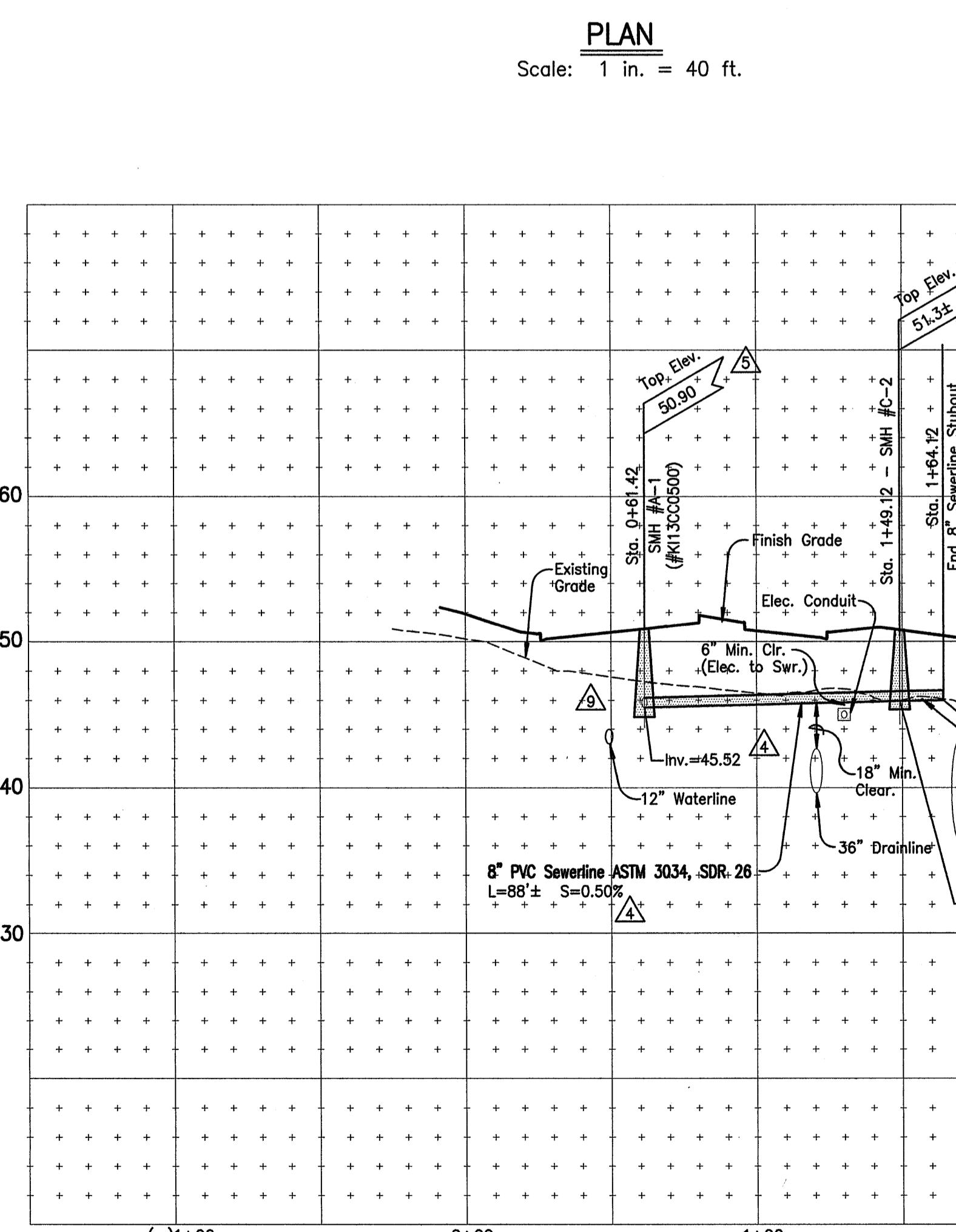
10	10	00		
DATE		OF	SHEETS	





**LEGEND:**

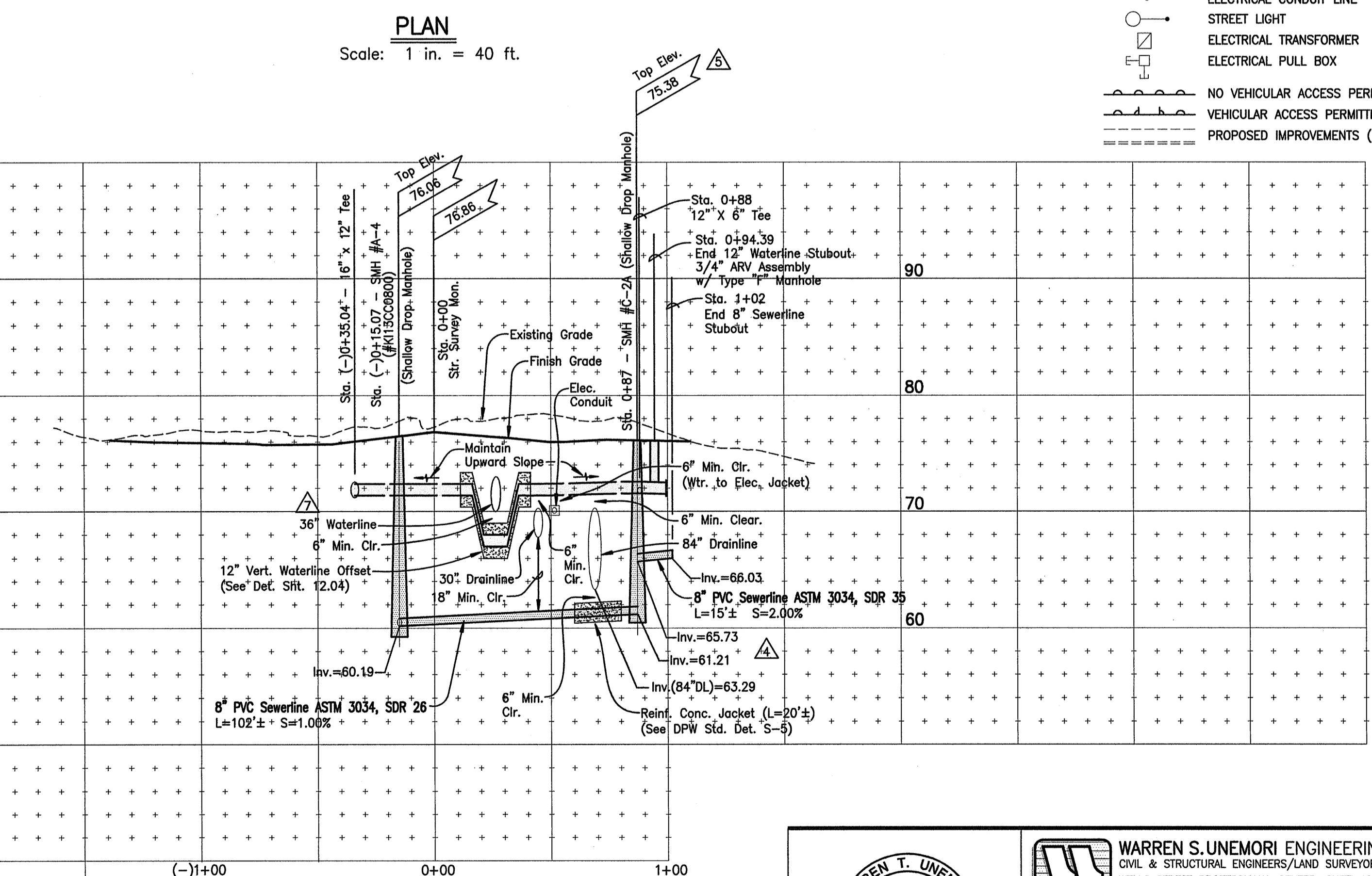
- SEWER MANHOLE
- DRAIN MANHOLE
- ◎ AIR RELIEF VALVE MANHOLE
- CATCH BASIN
- ◆ FIRE HYDRANT
- WB\* WATERLINE W/ SIZE
- D24\* DRAINLINE W/ SIZE
- SB\* SEWERLINE W/ SIZE
- CLEAN-OUT-TO-GRADE
- - - C5 DOUBLE SERVICE WATER LATERAL
- ● SINGLE SERVICE WATER LATERAL
- EW\* EXISTING WATERLINE W/ SIZE
- ED24\* EXISTING DRAINLINE W/ SIZE
- ES8\* EXISTING SEWERLINE W/ SIZE
- e ELECTRICAL CONDUIT LINE
- ● STREET LIGHT
- ELECTRICAL TRANSFORMER
- E ELECTRICAL PULL BOX
- NO VEHICULAR ACCESS PERMITTED
- V VEHICULAR ACCESS PERMITTED
- PROPOSED IMPROVEMENTS (BY OTHERS)



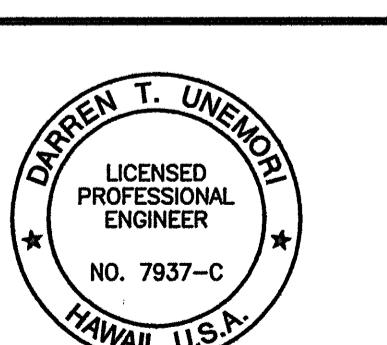
**PROFILE - KAONOLU STREET EXTENSION**

**SEWER LATERAL #1**

Scale: Horiz. 1" = 40'  
Vert. 1" = 8'



6 ADDED TYPE "F" MANHOLES FOR CLEANOUTS		10/01/10	
REVISED PER DWS COMMENTS	01/06/12	REVISED TOP MANHOLE ELEVATIONS	10/21/09
REVISED TOP MANHOLE ELEVATIONS	10/21/09	REVISED PER DWS COMMENTS	12/12/08
REMOVED LOT 1 SEWER LATERAL OUTLET #A-1 PER WWD COMMENT TO 16"	11/28/11	REVISED PER DWS COMMENTS	12/12/08
OUTFLOW WATERLINE O/SIZED TO 16"	10/17/11	REVISED PER WWD COMMENTS	10/01/08
36" WATERLINE RELOCATED TO KAONOLU STREET	03/11/11	LETTER DESCRIPTION DATE	



**WARREN S. UNEMORI ENGINEERING, INC.**  
CIVIL & STRUCTURAL ENGINEERS/LAND SURVEYORS

WELLS STREET PROFESSIONAL CENTER, SUITE 403

2145 WELLS STREET, WAILUKU, MAUI, HAWAII 96793

**KAONOLU MARKET PLACE**

T.M.K.: (2) 3-9-01 : 16

KIHEI, MAUI, HAWAII

PLAN & PROFILE - KAONOLU ST. EXT.

TITLE: SEWER LATERALS #1 AND #2

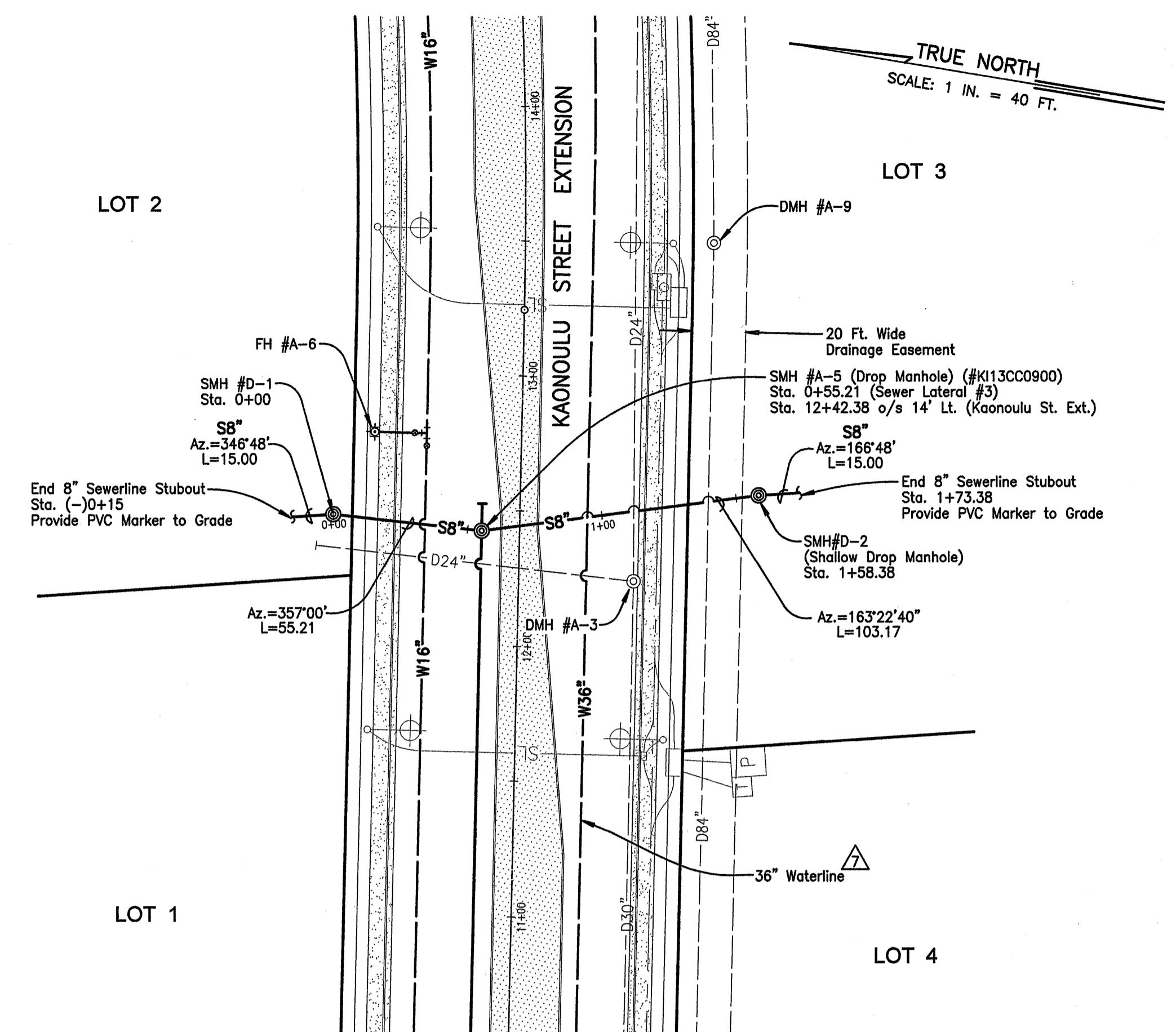
SIGNATURE: *[Signature]* DATE: *[Date]*

THIS WORK WAS PERFORMED BY ME OR UNDER MY SUPERVISION AS A PROFESSIONAL ENGINEER. I WILL BE UNDER MY OBLIGATION "AS DESCRIBED" IN SECTION 16-115-2 OF THE HAWAIIAN RULES FOR PROFESSIONAL ENGINEERS, ARCHITECTS, LAND SURVEYORS AND LANDSCAPE ARCHITECTS."

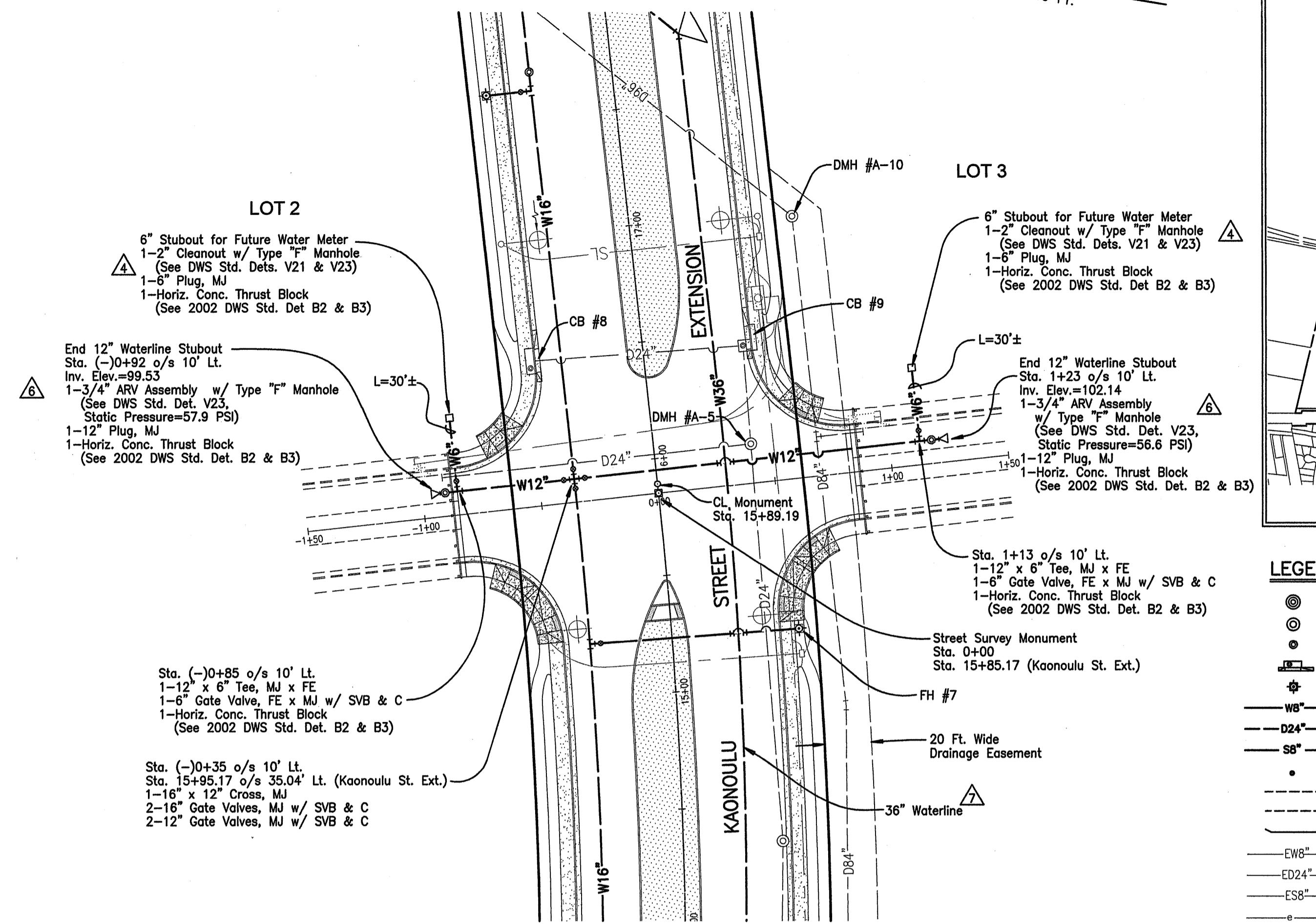
DTU DESIGNED BY DTU CHECKED BY 04010.10 JOB NUMBER

WIS DRAWN BY DTU APPROVED BY 10-10-05 DATE

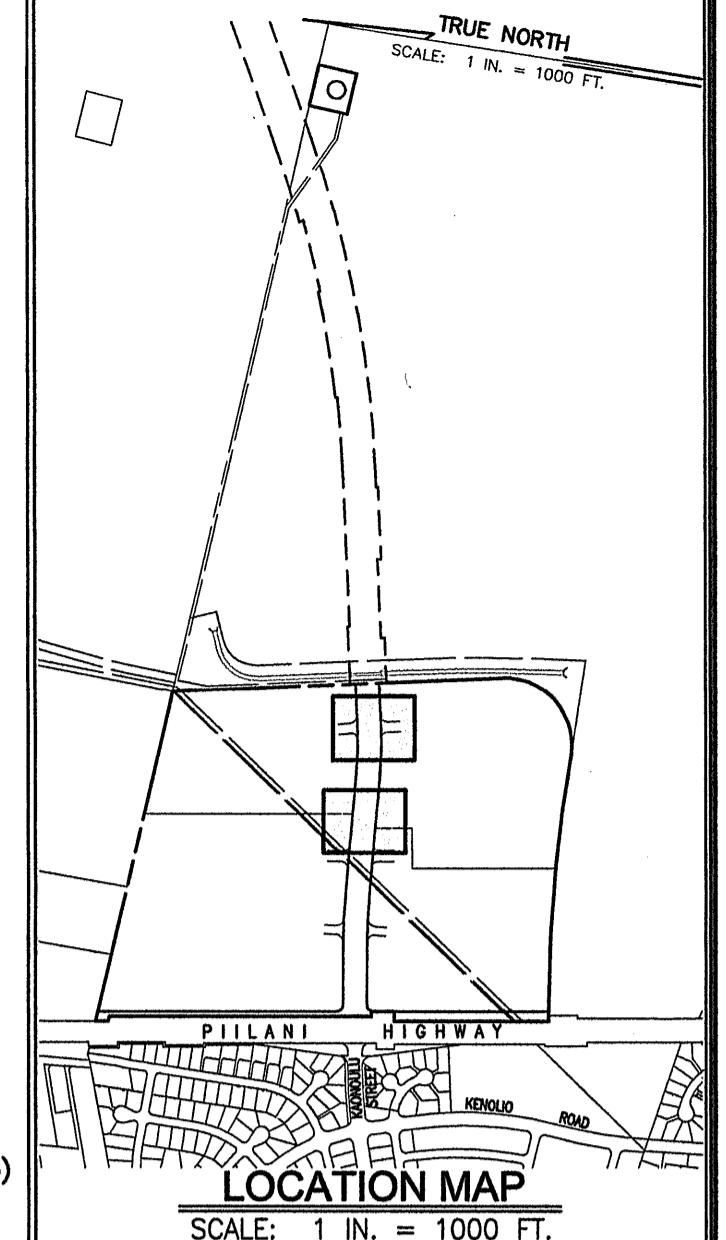
SCALE 1 in. = 40 ft. SHEET OF SHEETS



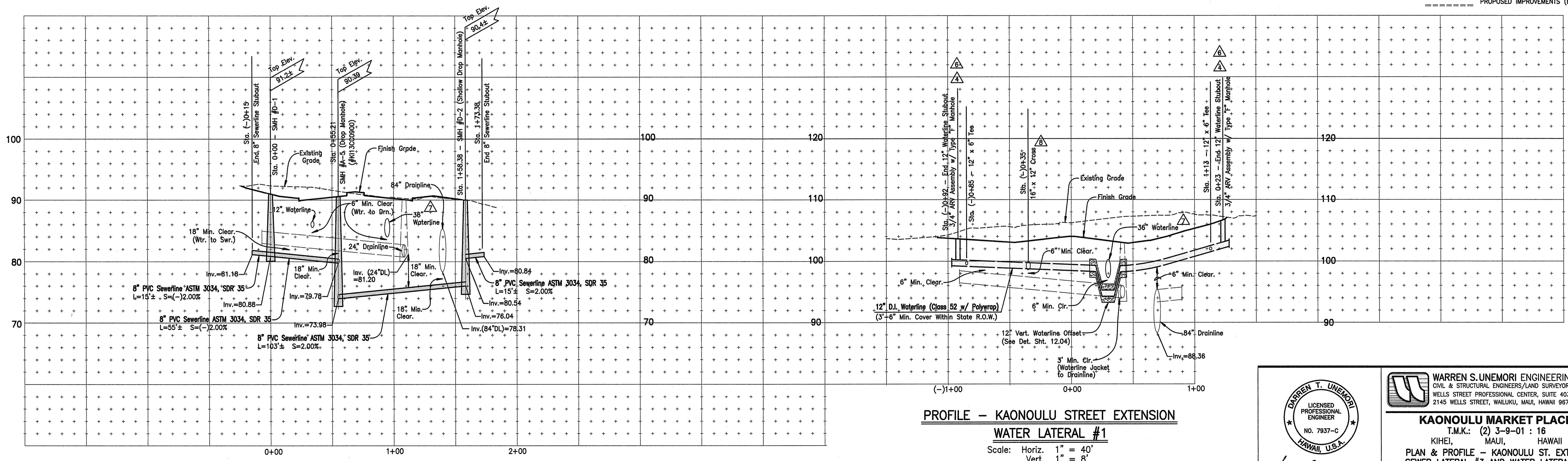
PLAN



**PLAN**



<u>LEGEND:</u>	
(○)	SEWER MANHOLE
(◎)	DRAIN MANHOLE
(◎)	AIR RELIEF VALVE MANHOLE
	CATCH BASIN
	FIRE HYDRANT
—W8"—	WATERLINE W/ SIZE
—D24"—	DRAINLINE W/ SIZE
—S8"—	SEWERLINE W/ SIZE
•	CLEAN-OUT-TO-GRADE
-----□	SINGLE SERVICE WATER LATERAL
-----□□	DOUBLE SERVICE WATER LATERAL
—○—	SINGLE SERVICE SEWER LATERAL
—EW8"—	EXISTING WATERLINE W/SIZE
—ED24"—	EXISTING DRAINLINE W/SIZE
—ES8"—	EXISTING SEWERLINE W/SIZE
—e—	ELECTRICAL CONDUIT LINE
	STREET LIGHT
	ELECTRICAL TRANSFORMER
	ELECTRICAL PULL BOX
—○○○○—	NO VEHICULAR ACCESS PERMITTED
—○—b—○—	VEHICULAR ACCESS PERMITTED
-----	PROPOSED IMPROVEMENTS (BY OTHERS)



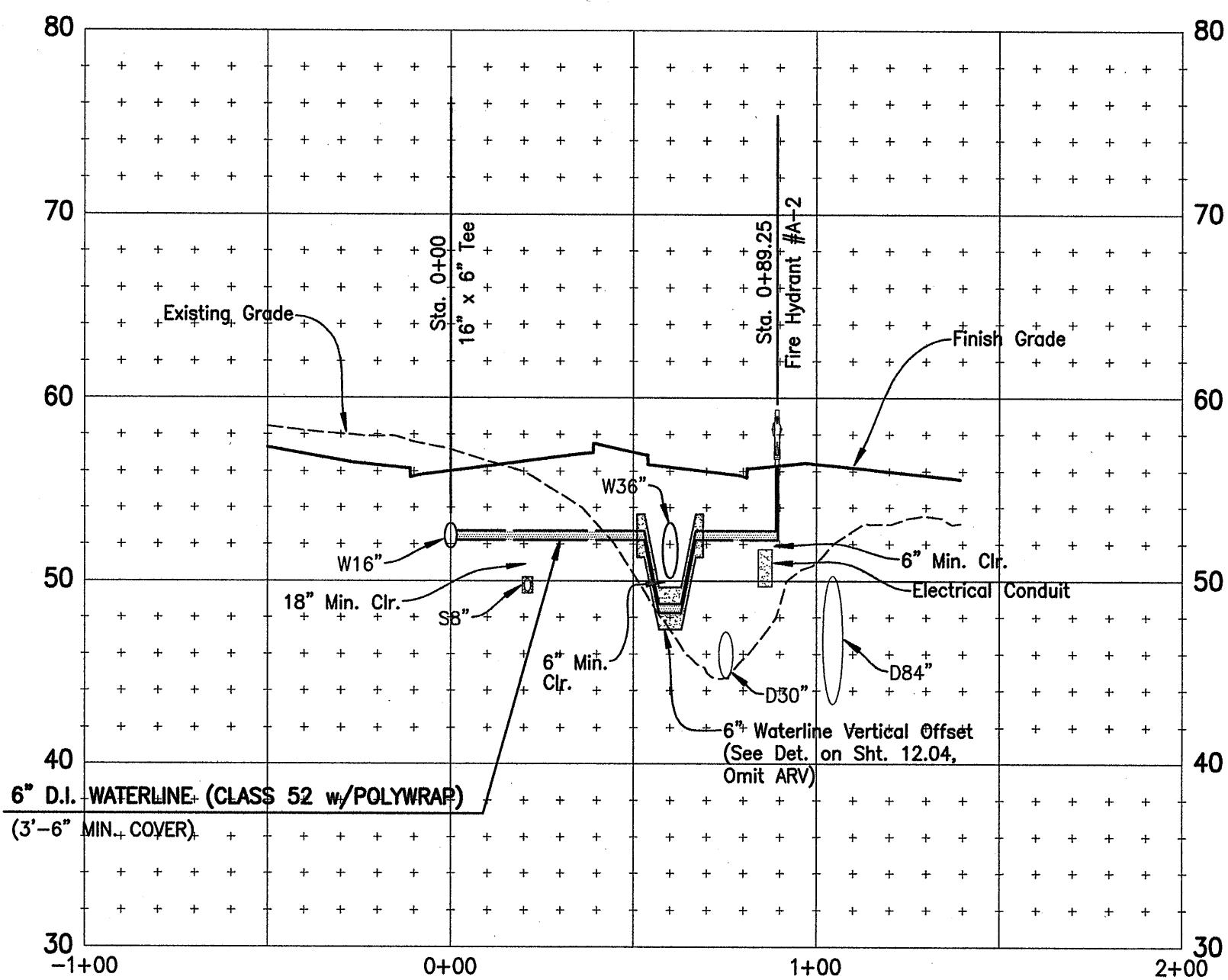
## PROFILE – KAONOULU STREET EXTENSION

**SEWER LATERAL #3**

## PROFILE - KAONOULU STREET EXTENSION

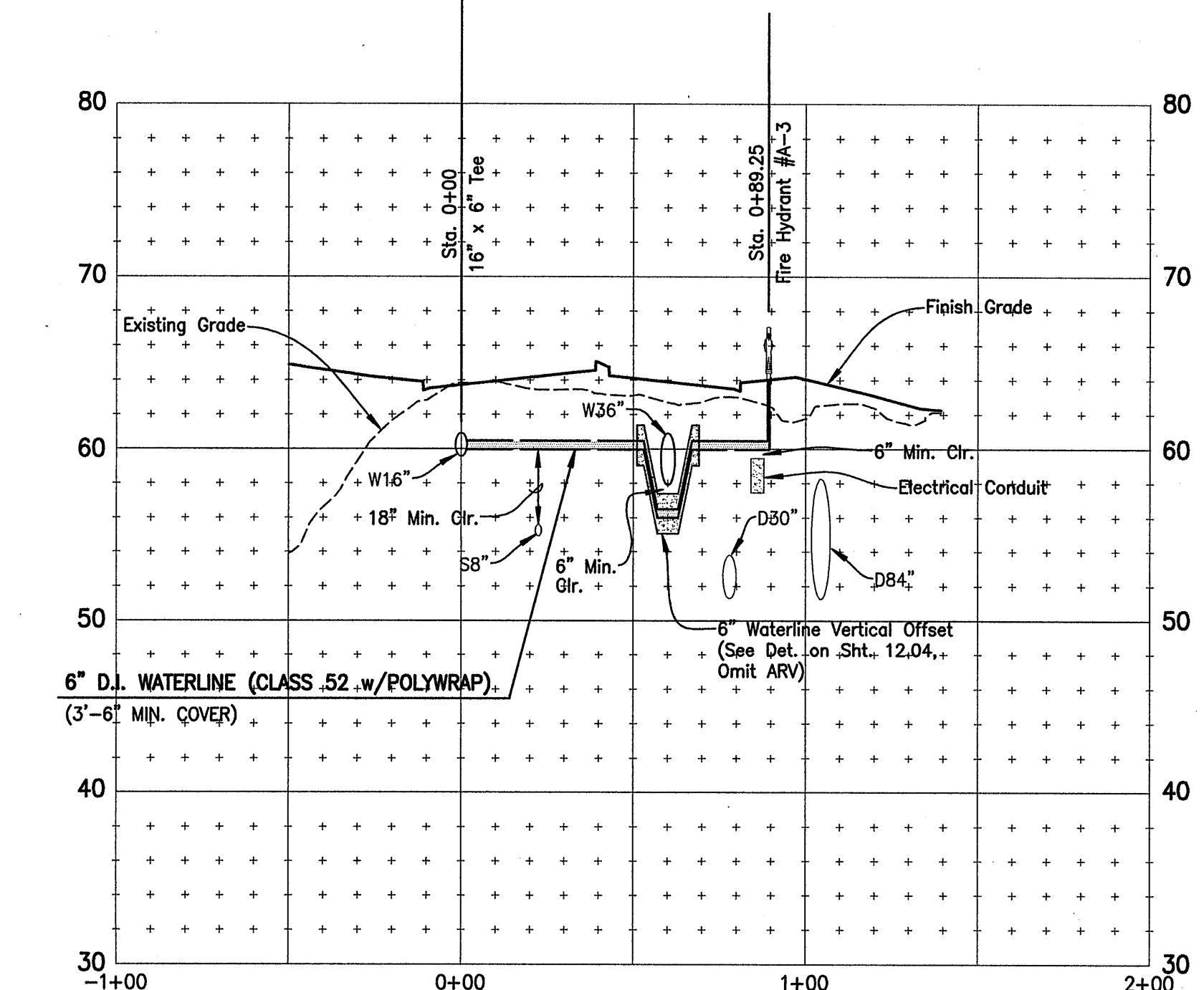
**WATER LATERAL #1**

			<b>6</b>	ADDED ARV ASSEMBLIES	10/01/10	<i>[Signature]</i> /4/2012 SIGNATURE DATE	DTU DESIGNED BY	DTU CHECKED BY	04010.10 JOB NUMBER	6.03B SHEET
<b>10</b>	REVISED PER DWS COMMENTS	01/06/12	<b>4</b>	REVISED PER DWS COMMENTS	12/12/08	THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION "AS DEFINED IN SECTION 16-115-2 OF THE HAWAII ADMINISTRATIVE RULES FOR PROFESSIONAL ENGINEERS, ARCHITECTS, LAND SURVEYORS AND LANDSCAPE ARCHITECTS"	WIS DRAWN BY	DTU APPROVED BY	10-10-05 DATE	
<b>8</b>	OUTFLOW WATERLINE UPSIZED TO 16"	10/17/11	<b>2</b>	REVISED PER WWRD COMMENTS	10/01/08					
<b>7</b>	36" WATERLINE RELOCATED TO KAONOULU STREET	03/11/11	LETTER	DESCRIPTION	DATE	SCALE 1 in. = 40 ft.				



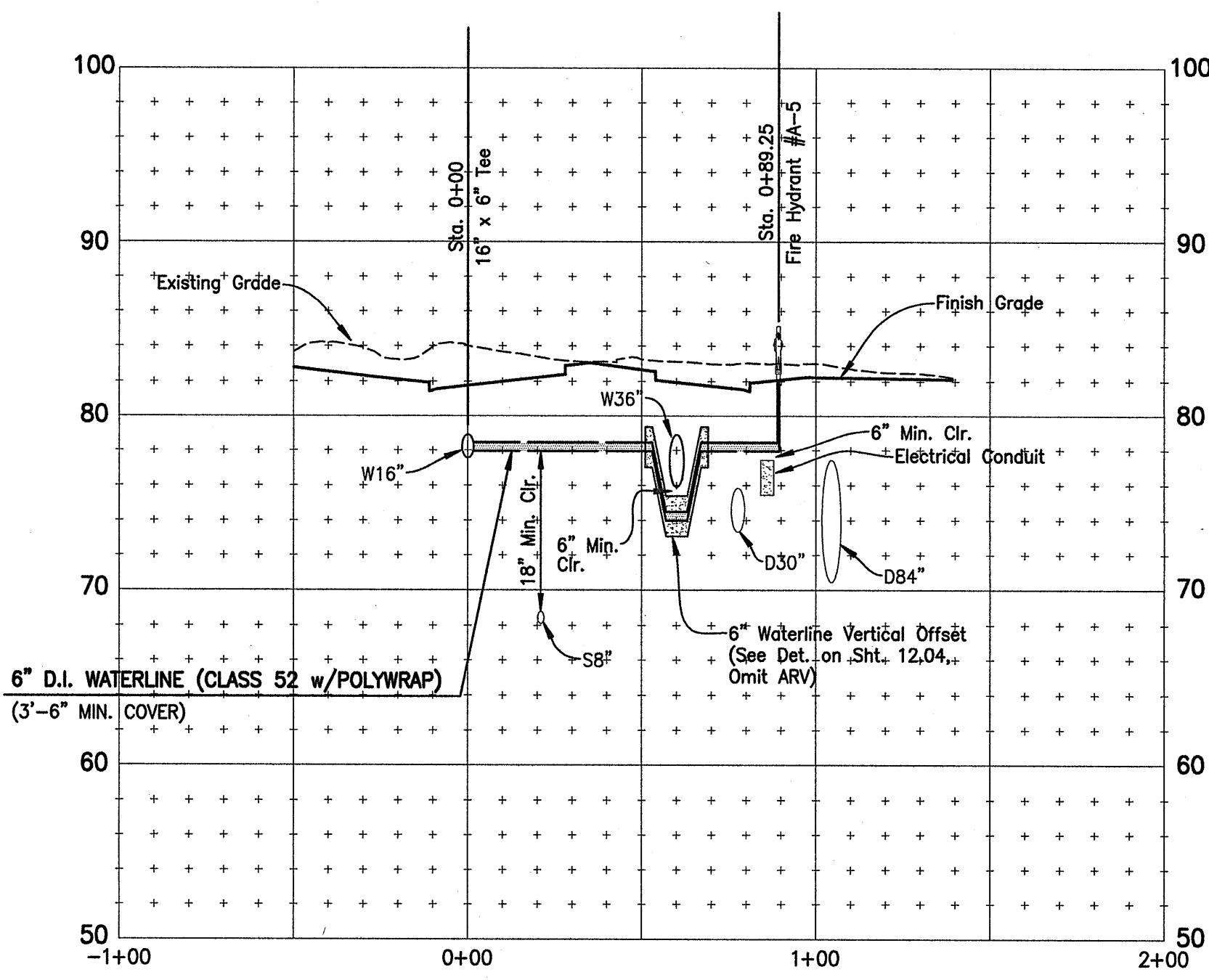
**PROFILE - WATERLINE CONNECTION FOR FIRE HYDRANT #A-2**  
@ STA. 3+93 (KAONOULU STREET EXTENSION)

Scale: Horiz. 1" = 40'  
Vert. 1" = 8'



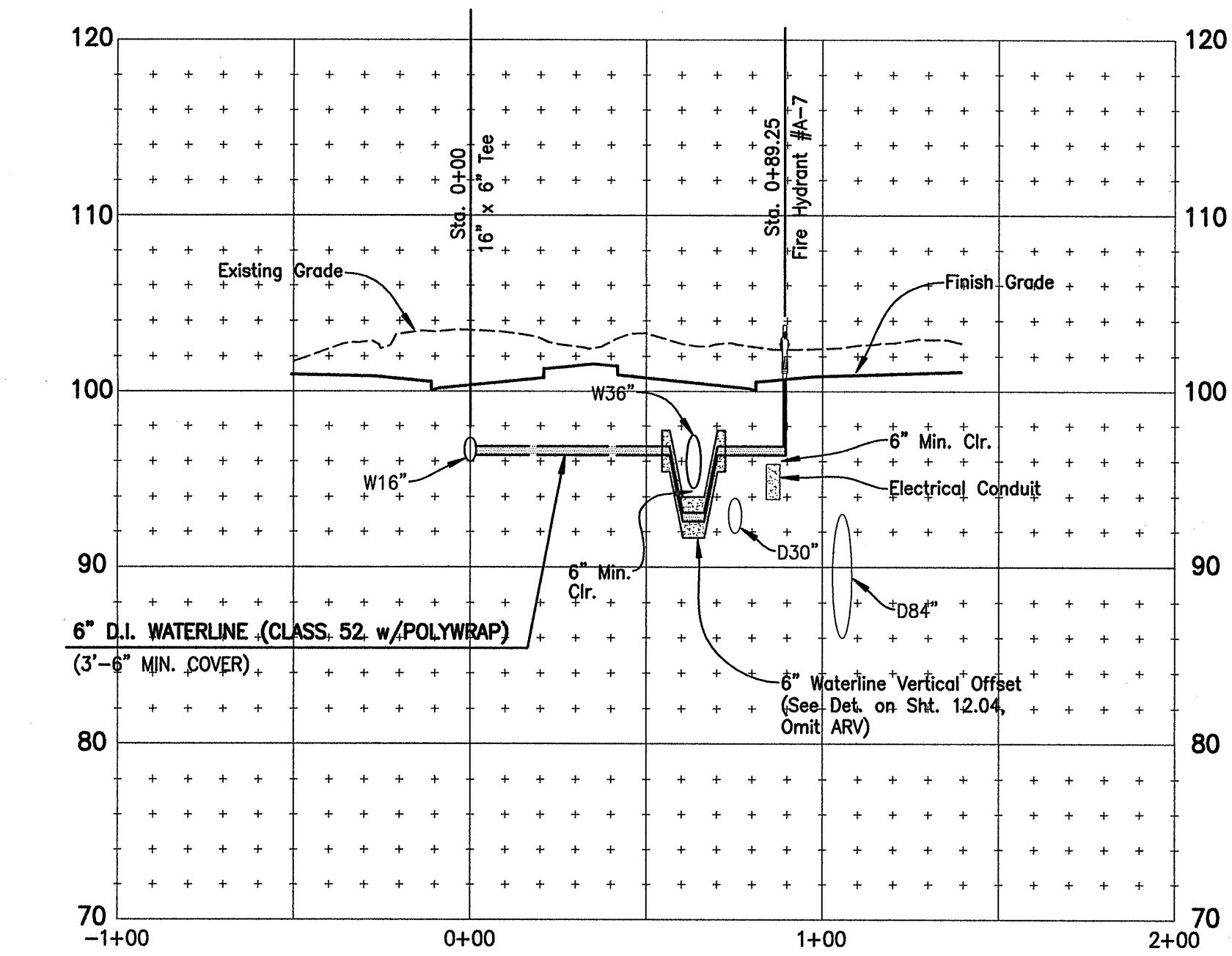
**PROFILE - WATERLINE CONNECTION FOR FIRE HYDRANT #A-3**  
@ STA. 6+15 (KAONOULU STREET EXTENSION)

Scale: Horiz. 1" = 40'  
Vert. 1" = 8'



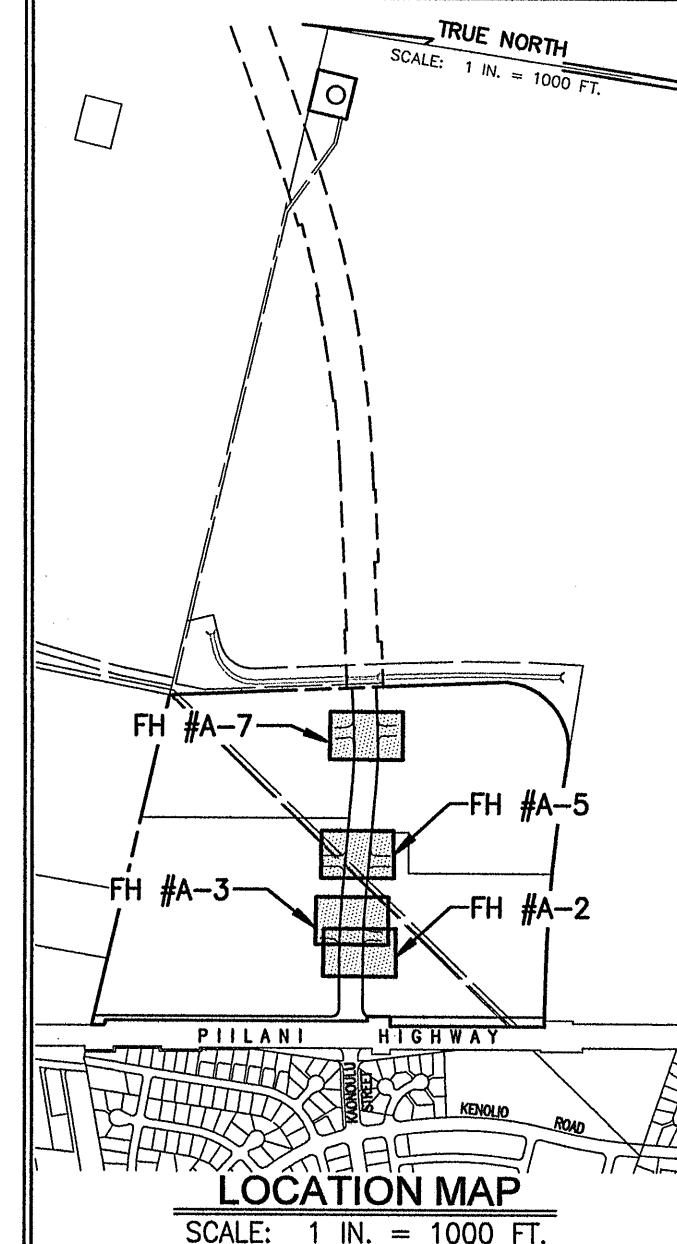
**PROFILE - WATERLINE CONNECTION FOR FIRE HYDRANT #A-5**  
@ STA. 10+45 (KAONOULU STREET EXTENSION)

Scale: Horiz. 1" = 40'  
Vert. 1" = 8'

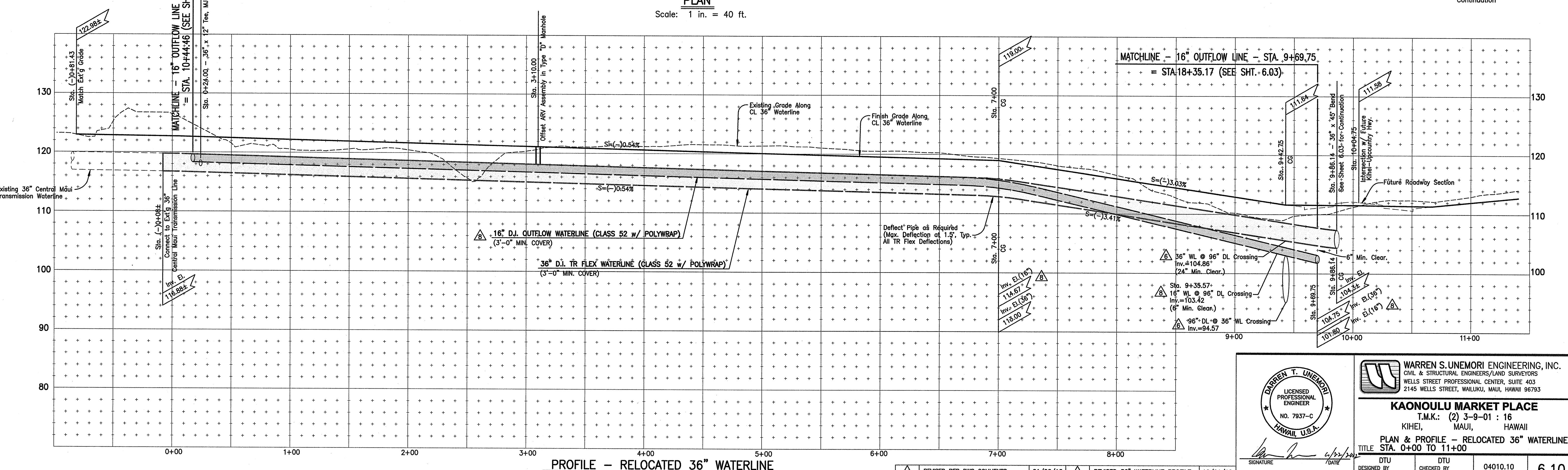
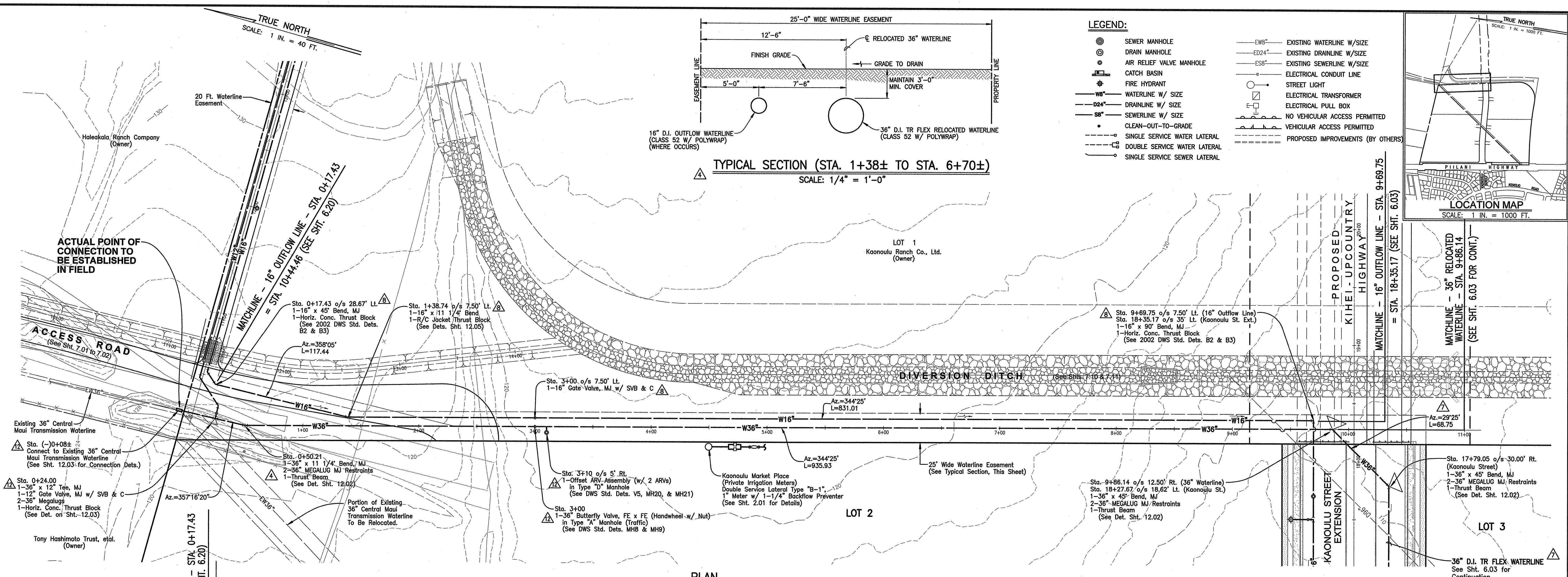


**PROFILE - WATERLINE CONNECTION FOR FIRE HYDRANT #A-7**  
@ STA. 15+00 (KAONOULU STREET EXTENSION)

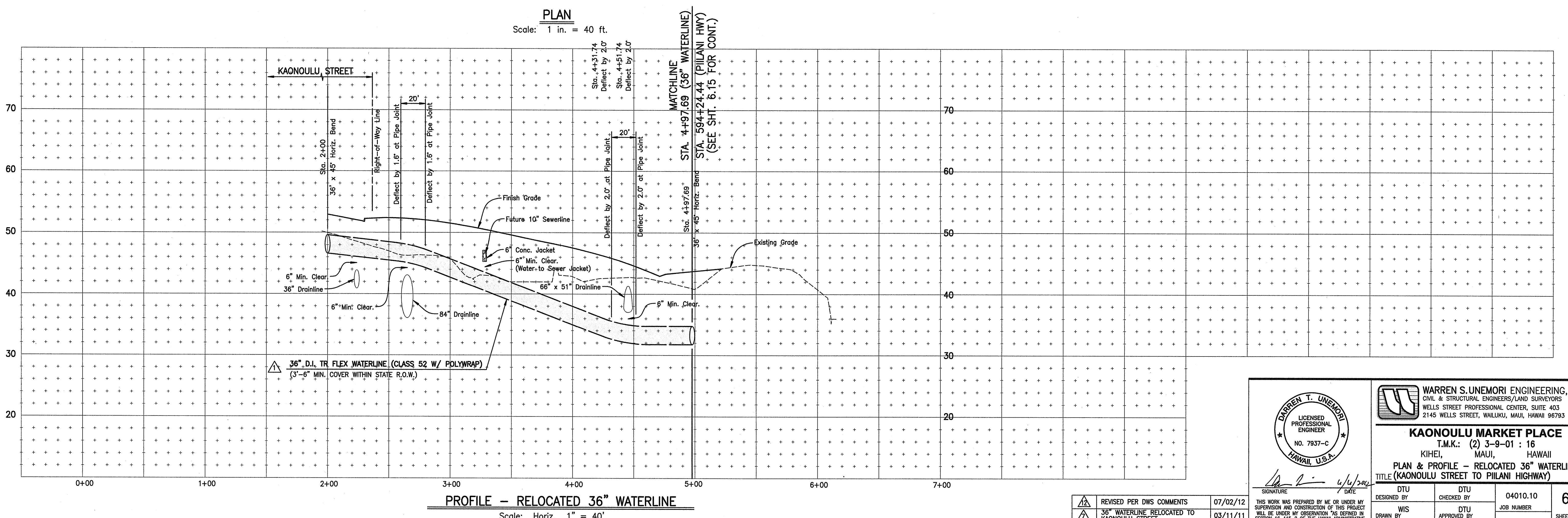
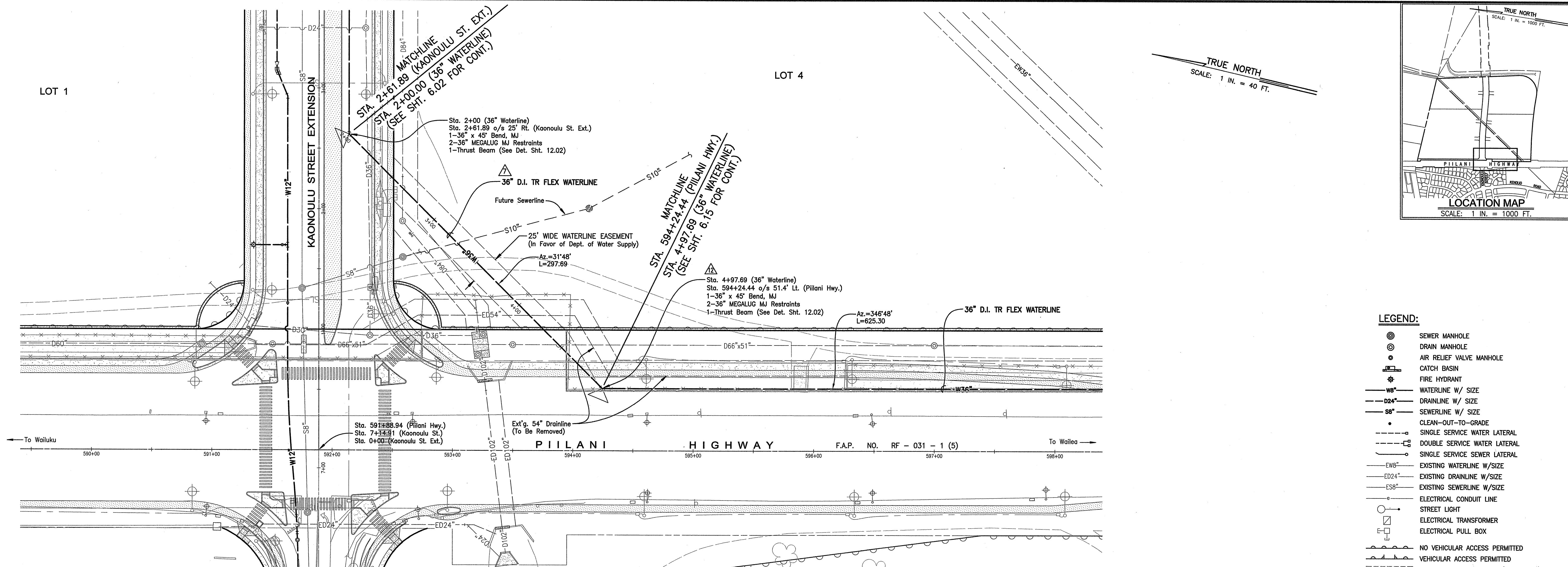
Scale: Horiz. 1" = 40'  
Vert. 1" = 8'

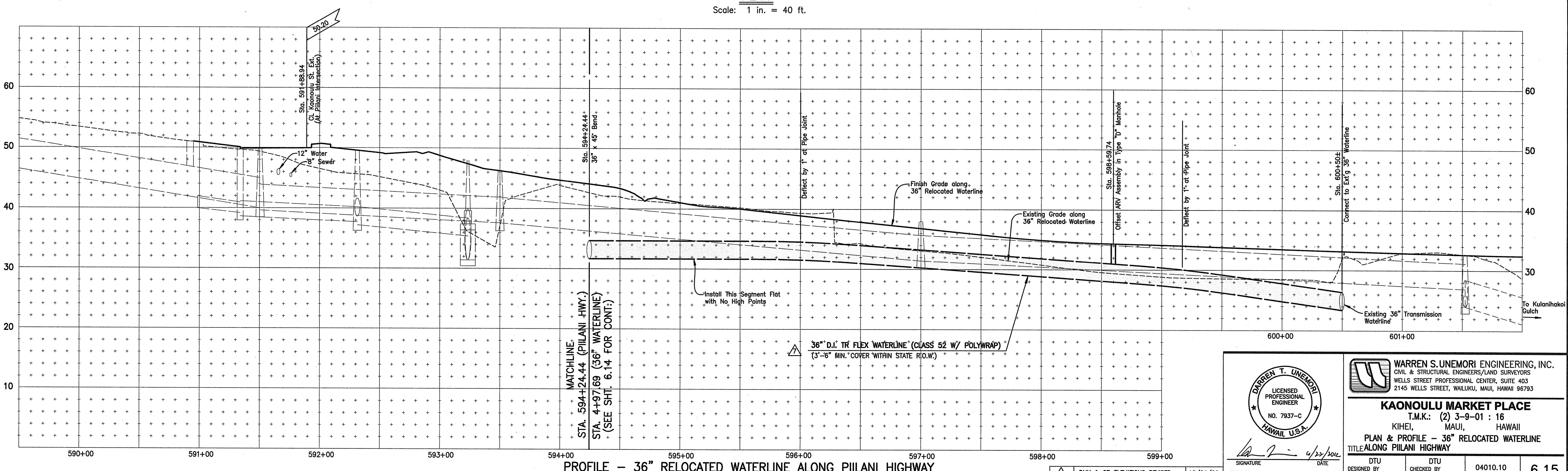
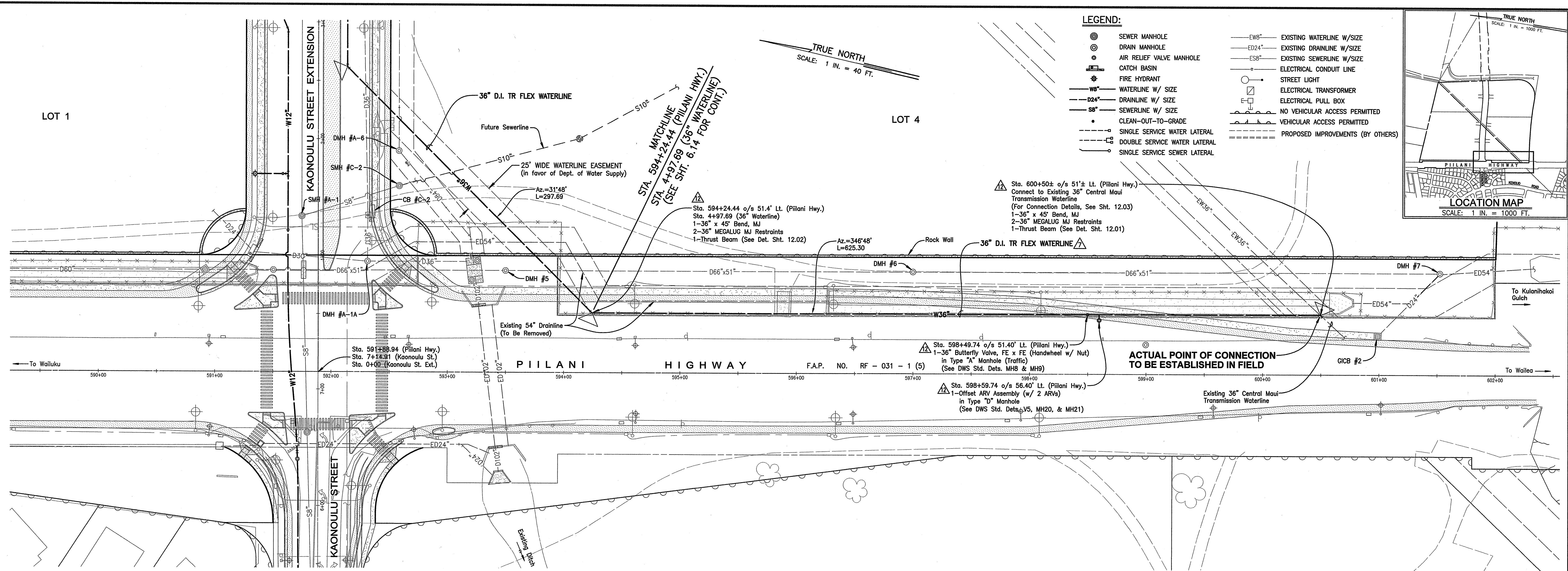


		WARREN S. UNEMORI ENGINEERING, INC.	
		CIVIL & STRUCTURAL ENGINEERS/LAND SURVEYORS	
		Wells Street Professional Center, Suite 403	
		2145 Wells Street, Wailuku, Maui, Hawaii 96793	
		KAONOULU MARKET PLACE	
		T.M.K.: (2) 3-9-01 : 16 KIHEI, MAUI, HAWAII	
TITLE PROFILES - FIRE HYDRANT LATERALS			
SIGNATURE	DATE	DTU	DTU
REvised per DWS comments	07/02/12	DESIGNED BY	CHECKED BY
REvised per DWS comments	01/06/12	WIS	DTU
LETTER	DESCRIPTION	DTU	APPROVED BY
SCALE 1 in. = 40 ft.			
SHEET 6.03C OF SHEETS			



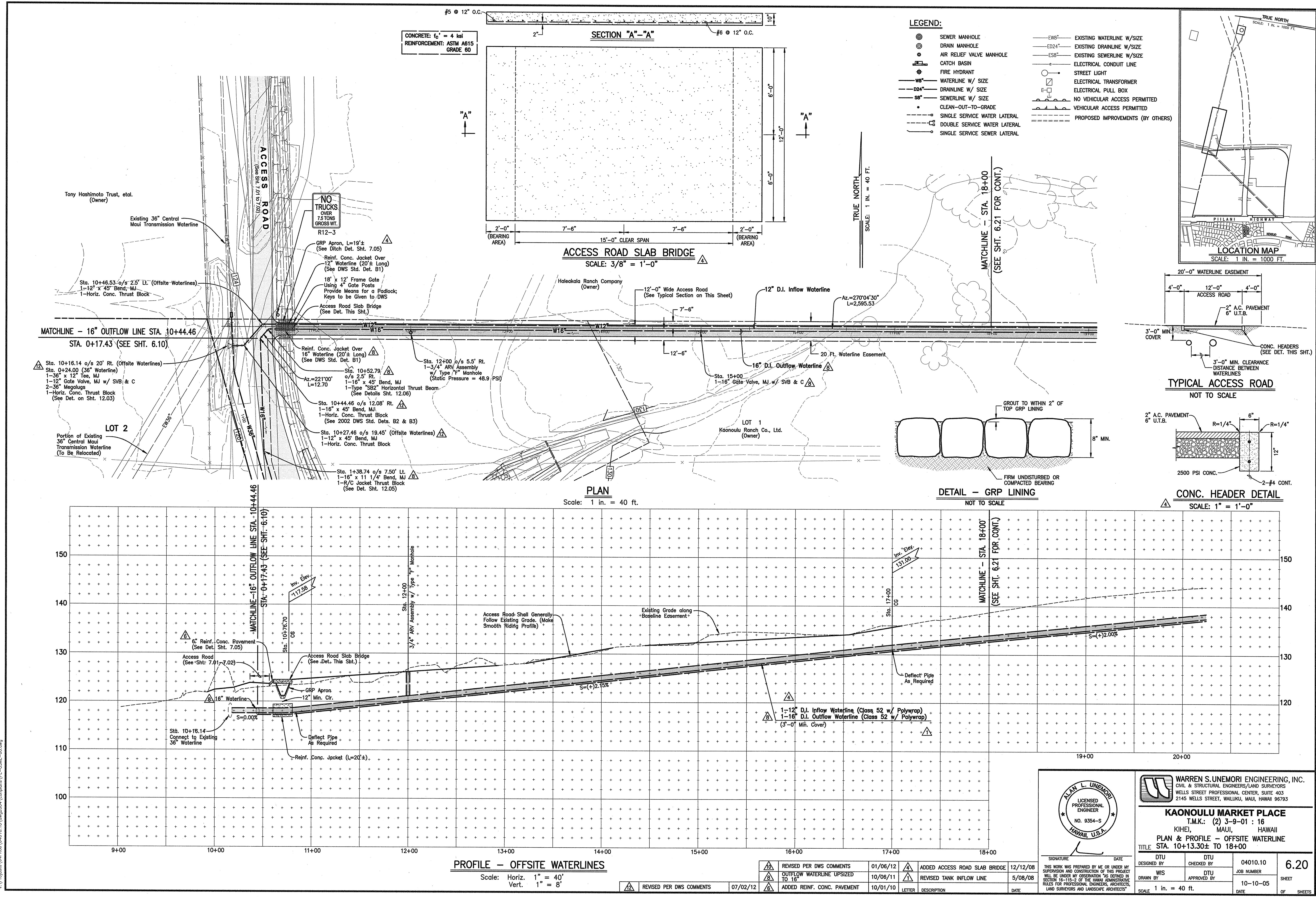
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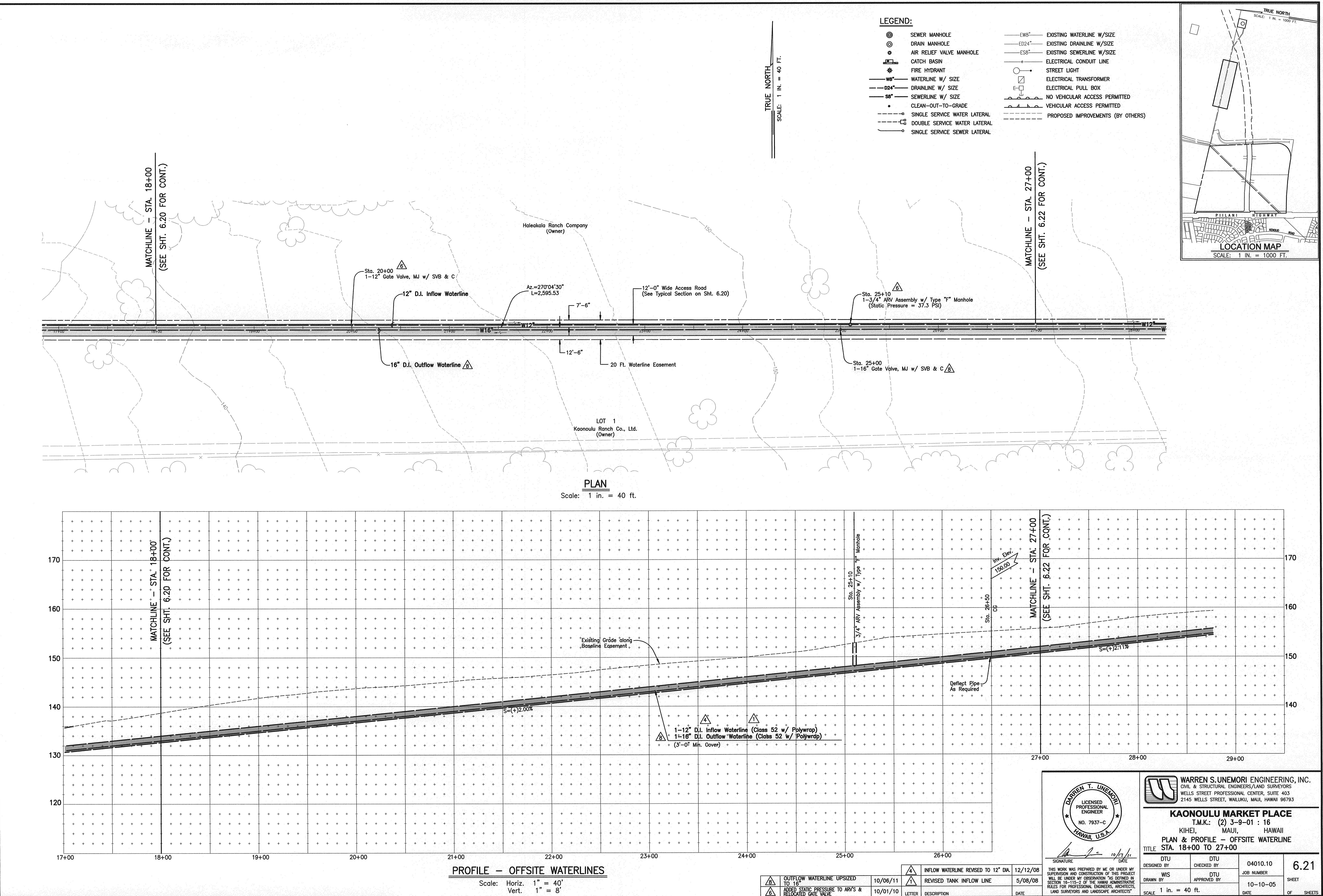


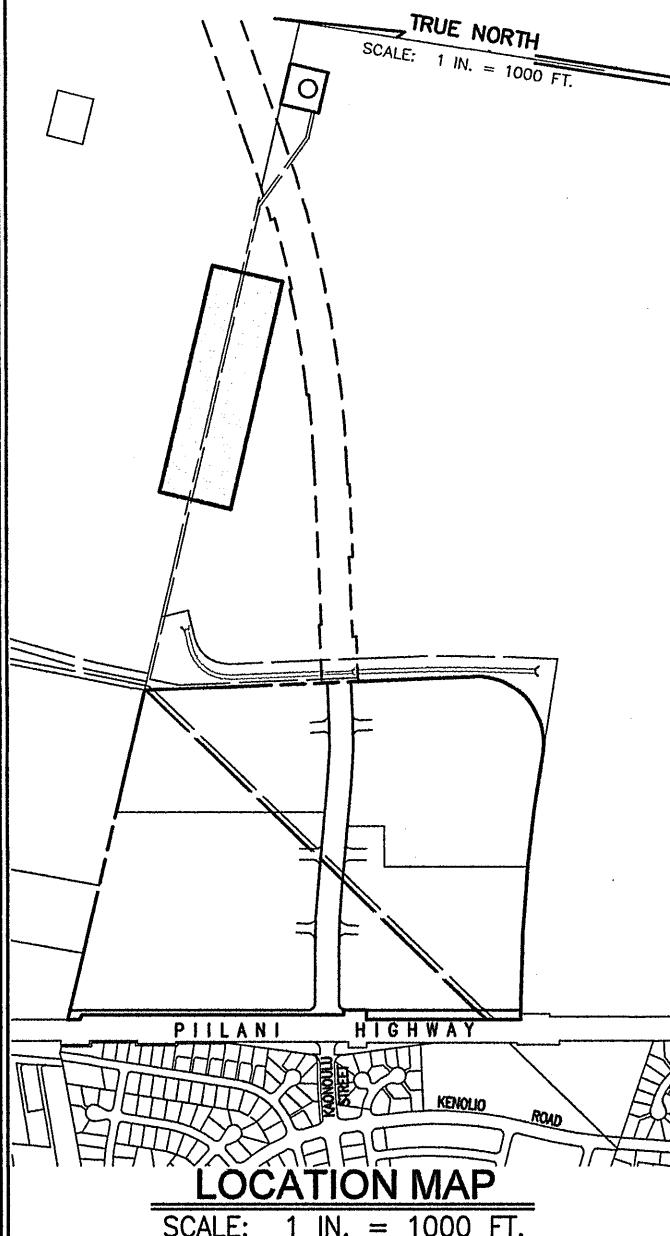
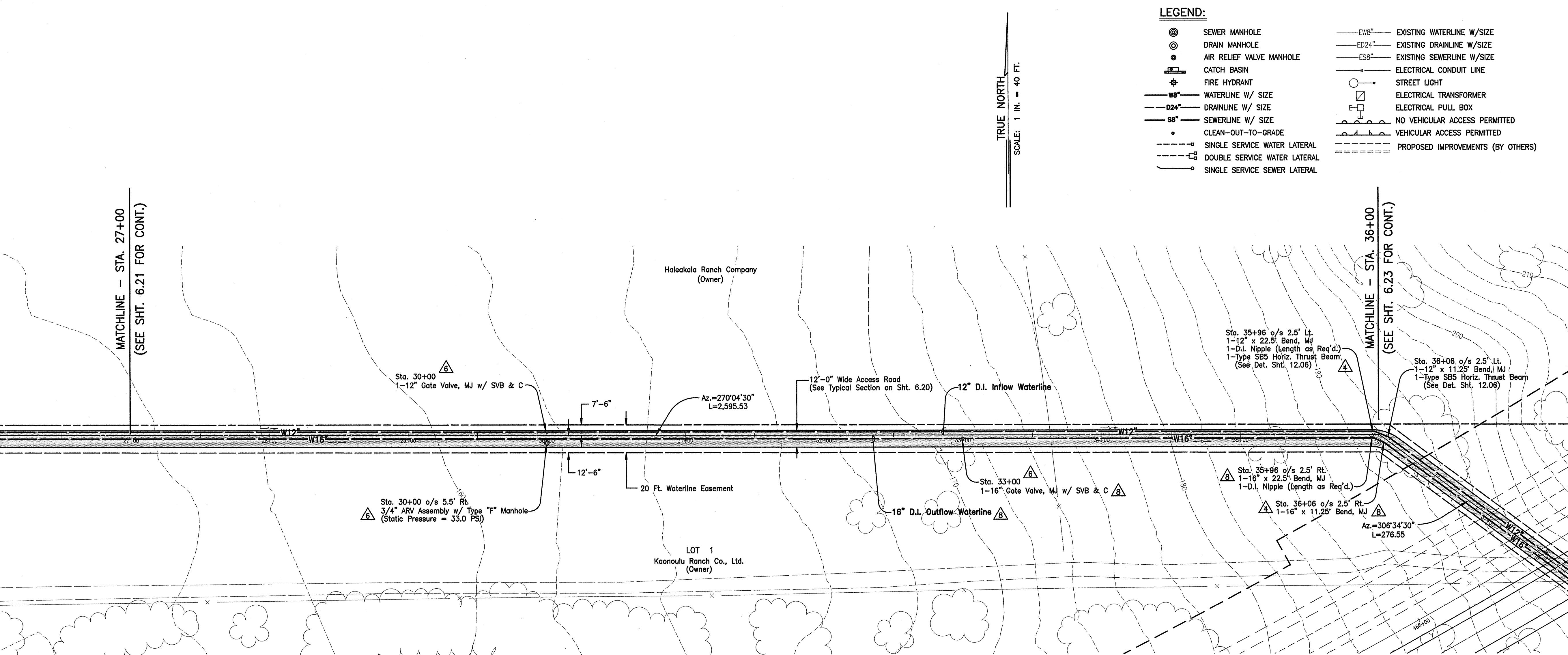


פְּרִימָקָטָה \ נַעֲמָה \ עַתְּדָה \ וְעַתְּדָה \ כְּנָפָדָה \ פְּרִימָקָטָה \ וְעַתְּדָה \ וְעַתְּדָה

פְּרִימָקָטָה \ נַעֲמָה \ עַתְּדָה \ וְעַתְּדָה \ כְּנָפָדָה \ פְּרִימָקָטָה \ וְעַתְּדָה







**MATCHLINE - STA. 27+00 (SEE SHT. 6.21 FOR CONT.)**

**MATCHLINE - STA. 36+00 (SEE SHT. 6.23 FOR CONT.)**

**Manhole**

**ARV Assembly w/ Type "F"**

**3/4" ARV Assembly w/ Type "F"**

**Existing Grade along Baseline Easement**

**Deflect Pipe As Required**

**Inv. Elev. 213.00**

**Inv. Elev. 188.50**

**Inv. Elev. 160.00**

**Inv. Elev. 172.00**

**Inv. Elev. 170.78%**

**Inv. Elev. 172.11%**

**1-12" D.I. Inflow Waterline (Class 52 w/ Polywrap)**

**1-16" D.I. Outflow Waterline (Class 52 w/ Polywrap)**

**(3'-0" Min. Cover)**

**DARREN T. UNEMORI**  
LICENSED PROFESSIONAL ENGINEER  
NO. 7937-C  
HAWAII, U.S.A.

**WARREN S. UNEMORI ENGINEERING, INC.**  
CIVIL & STRUCTURAL ENGINEERS/LAND SURVEYORS  
WELLS STREET PROFESSIONAL CENTER, SUITE 403  
2145 WELLS STREET, WAILUKU, MAUI, HAWAII 96793

**KAONOULU MARKET PLACE**  
T.M.K.: (2) 3-9-01 : 16  
KIHEI, MAUI, HAWAII  
PLAN & PROFILE - OFFSITE WATERLINE  
TITLE STA. 27+00 TO 36+00

**SIGNATURE** / / 2012 **DATE**

v:\Projdata\04PROJ\04010.10\dwg2004\conplans\PL-OSWL-00.dwg

w:\Prco

## PROFILE - OFFSITE WATERLINES

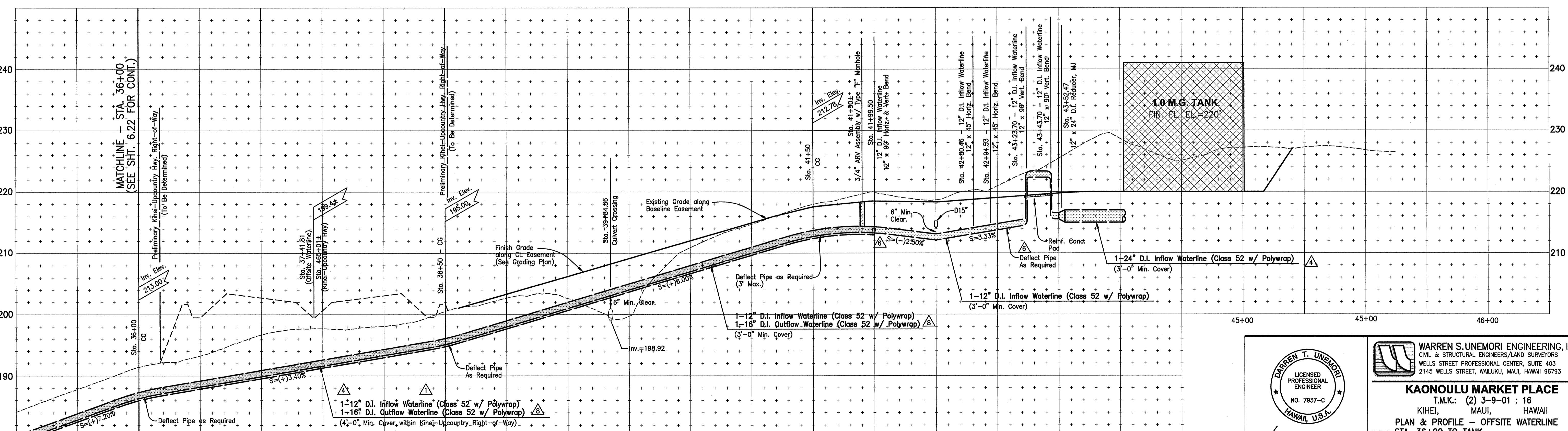
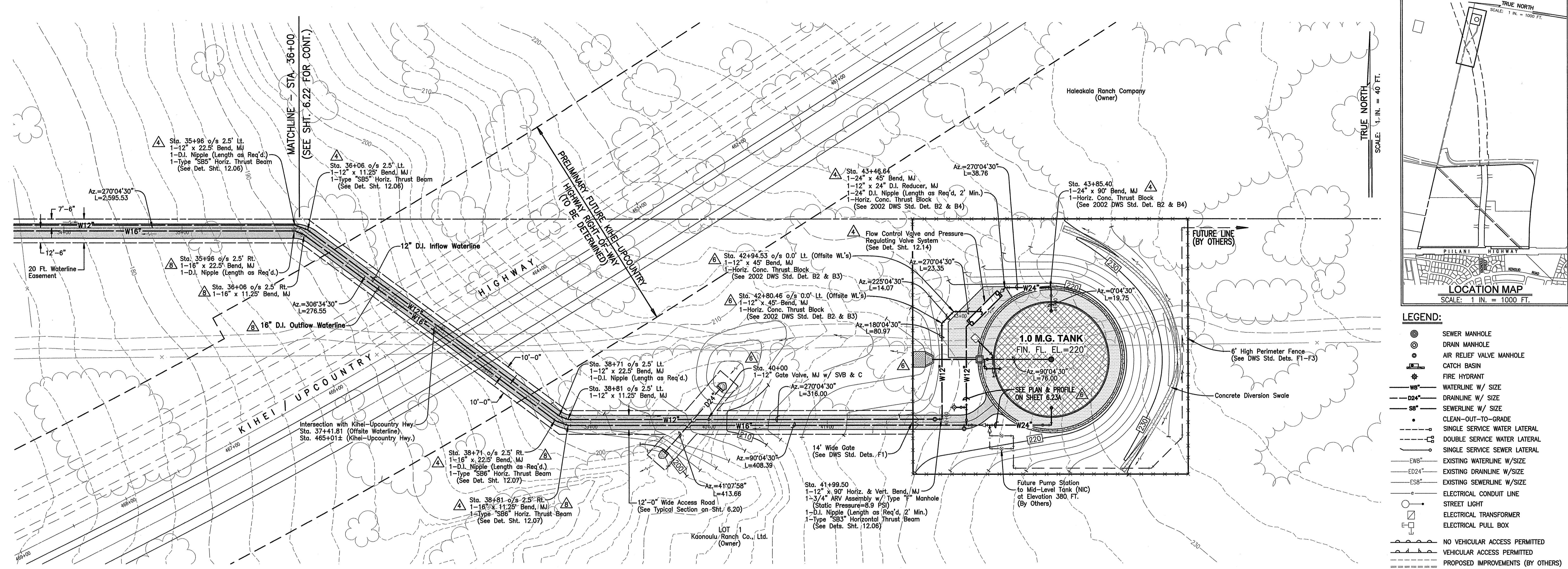
Scale: Horiz. 1" = 40'  
Vert. 1" = 8'

	REVISED PER DWS COMMENTS	01/06/12		REVISED PER DWS COMMENTS	12/12/08	THIS WORK SUPERVISOR WILL BE SECTION RULES FOR LAND S
	OUTFLOW WATERLINE UPSIZED TO 16"	10/06/11		REVISED TANK INFLOW LINE	5/08/08	
	ADDED STATIC PRESSURE TO ARV'S & RELOCATED GATE VALVE	10/01/10	LETTER	DESCRIPTION	DATE	

DARREN T. UNEMORI  
LICENSED  
PROFESSIONAL  
ENGINEER  
NO. 7937-C  
HAWAII, U.S.A.

T.M.K.: (2) 3-9-01 : 16  
KIHEI, MAUI, HAWAII  
PLAN & PROFILE - OFFSITE WATERLINE  
STA. 27+00 TO 36+00

DTU DESIGNED BY	DTU CHECKED BY	04010.10 JOB NUMBER	6.22 SHEET
WIS DRAWN BY	DTU APPROVED BY	10-10-05 DATE	
CALE	1 in. = 40 ft.		OF SHEETS



DTU DESIGNED BY	DTU CHECKED BY	04010.10 JOB NUMBER
WIS DRAWN BY	DTU APPROVED BY	10-10-05 DATE
SCALE 1 in. = 40 ft. SHEET OF SHEETS		

**WARRREN S. UNEMORI ENGINEERING, INC.**  
CIVIL & STRUCTURAL ENGINEERS/LAND SURVEYORS  
WELLS STREET PROFESSIONAL CENTER, SUITE 403  
2145 WELLS STREET, WAILUKU, MAUI, HAWAII 96793

**KAONOU MARKET PLACE**  
T.M.K.: (2) 3-9-01 : 16  
KIHEI, MAUI, HAWAII

**PLAN & PROFILE - OFFSITE WATERLINE**  
TITLE STA. 36+00 TO TANK

**REVISIONS**

REVISED PER DWS COMMENTS TO 18"	01/06/12	REVISED PER DWS COMMENTS RELOCATED TANK OUTLET STRUCTURE	12-12-08
OUTFLOW WATERLINE UPSIZED 10/06/11		REVISED TANK INFLOW LINE	5-8-08
RELOCATED TANK OUTLET STRUCTURE 10/01/10	LETTER	DESCRIPTION	DATE

**SIGNATURE**  
DATE: 1/6/08

This work was prepared by me or under my supervision. I certify that it has been prepared in accordance with the applicable codes and standards of the State of Hawaii. This drawing will be under my observation "as defined in section 16-115-2 of the Hawaii Administrative Rules for Professional Engineers, Architects, Land Surveyors and Landscape Architects".